London, May 31, 1792.

TO THE ENCOURAGERS OF THE POLITE ARTS.

THIS DAY IS PUBLISHED, No. I. OF A NEW WORK,

IN THE

GOTHIC STYLE OF ARCHITECTURE,

DEDICATED TO

THE RIGHT HONOURABLE WILLIAM CONYNGHAM.

PROPOSALS

FOR PUBLISHING BY SUBSCRIPTION,

DESIGNS OF THE CHURCH AND ROYAL MONASTERY OF

B A T A L H A,

Including the MAUSOLEUM of King JOHN I. and King EMANUEL,

Situate in the Province of ESTRE-MADURA, in PORTUGAL;

Meaſured and Drawn on the Spot, in the Year 1789,

BY JAMES MURPHY, ARCHITECT.

WITH

An HISTORICAL and DESCRIPTIVE ACCOUNT of this famous Gothic Structure;

Tranſlated from the Portugueſe of FR. LUIS DE SOUSA.

With REMARKS and OBSERVATIONS by the AUTHOR.

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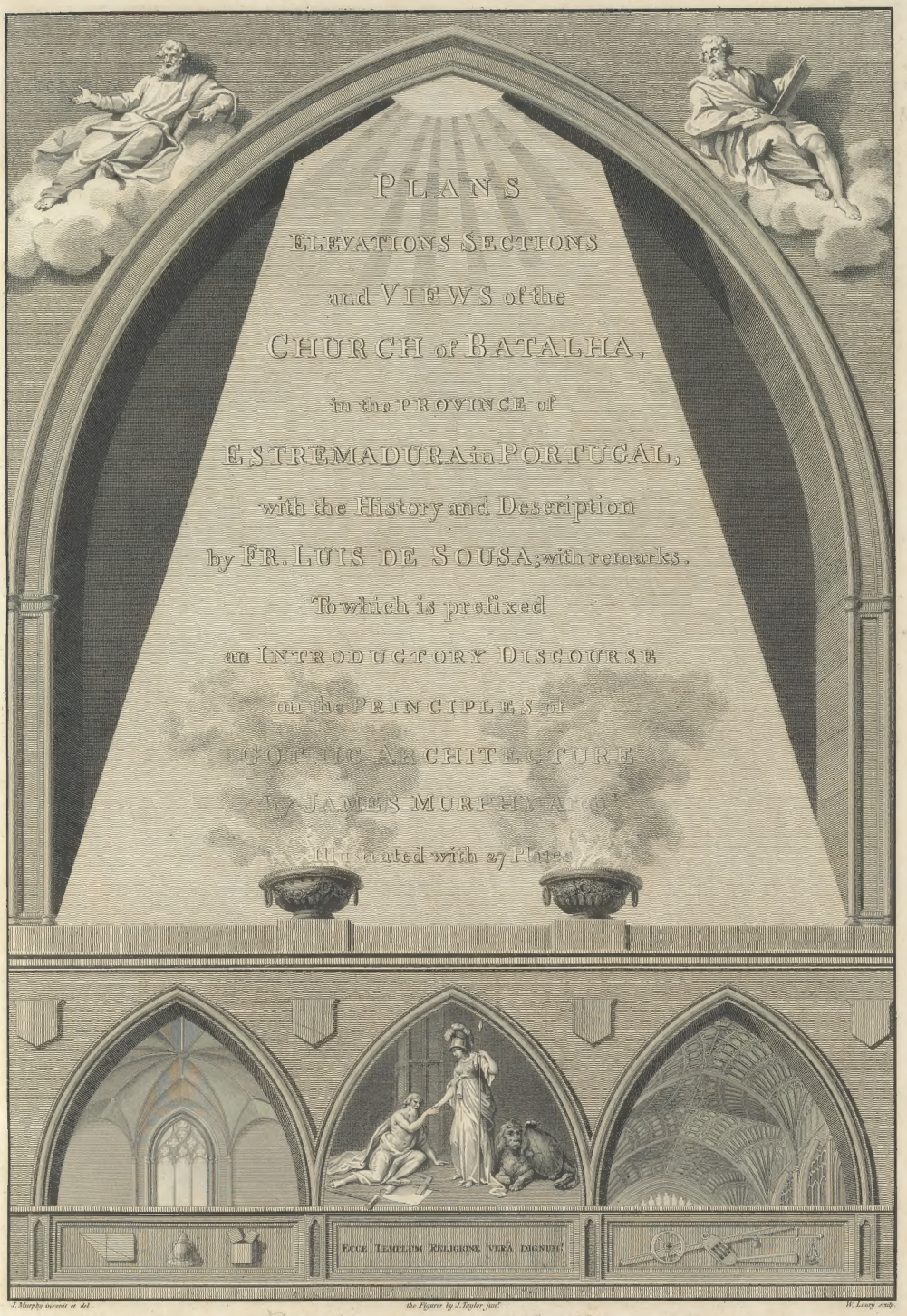


J. Murphy inventit et del. the Figures by J. Taylor jun.r W. Lowry sculp.

LONDON Printed for I & J. TAYLOR, High Holborn MDCCXCV.

TO

THE RIGHT HONOURABLE

WILLIAM CONYNGHAM

ONE OF HIS MAJESTY'S MOST HONOURABLE PRIVY COUNCIL

TELLER OF THE EXCHEQUER IN IRELAND

TREASURER OF THE ROYAL IRISH ACADEMY

FELLOW OF THE SOCIETY OF ANTIQUARIES LONDON &c. &c.

THIS WORK IS HUMBLY DEDICATED

BY HIS MOST OBEDIENT

AND VERY MUCH OBLIGED

HUMBLE SERVANT

LONDON MAY III MDCCXCII

JAMES MURPHY

PREFACE.

THE Royal Monaſtery of Batalha, the ſubject of the following Work, is a ſtructure very little known, though the excellence of its architecture juſtly entitles it to rank with the moſt celebrated Gothic edifices of Europe. My firſt knowledge of this venerable pile, was derived from ſeeing ſome ſketches of it in the poſſeſſion of the Right Honourable William Conyngham, taken by himſelf, and two other gentlemen * who travelled with him through Portugal in the year 1783. Theſe ſketches, which are very correct repreſentations of the original, gave me ſo high an idea of that building, as to excite in me an earneſt deſire to viſit it; and the above Gentleman having generouſly offered me his patronage and ſupport, I ſet out from Dublin, in a trading veſſel, and arrived at Oporto in the month of January 1789. Whence I departed after a ſhort ſtay, and in ſeven days reached Batalha, where I was kindly received by the Prior and all the Convent.

This Monaſtery is ſituated in a ſmall village of the ſame name, in the province of Eſtremadura in Portugal, about ſixty miles N. of Liſbon; it is environed by mountains, ſome of which produce pine and olive trees. The country around it is pretty well cultivated, particularly the plains, which are naturally fertile, and well watered, yielding great quantities of excellent grapes and olives. The village is inhabited chiefly by indigent but induſtrious people, many of whom derive a comfortable ſubſiſtence from their employments in the ſervice of the Convent.

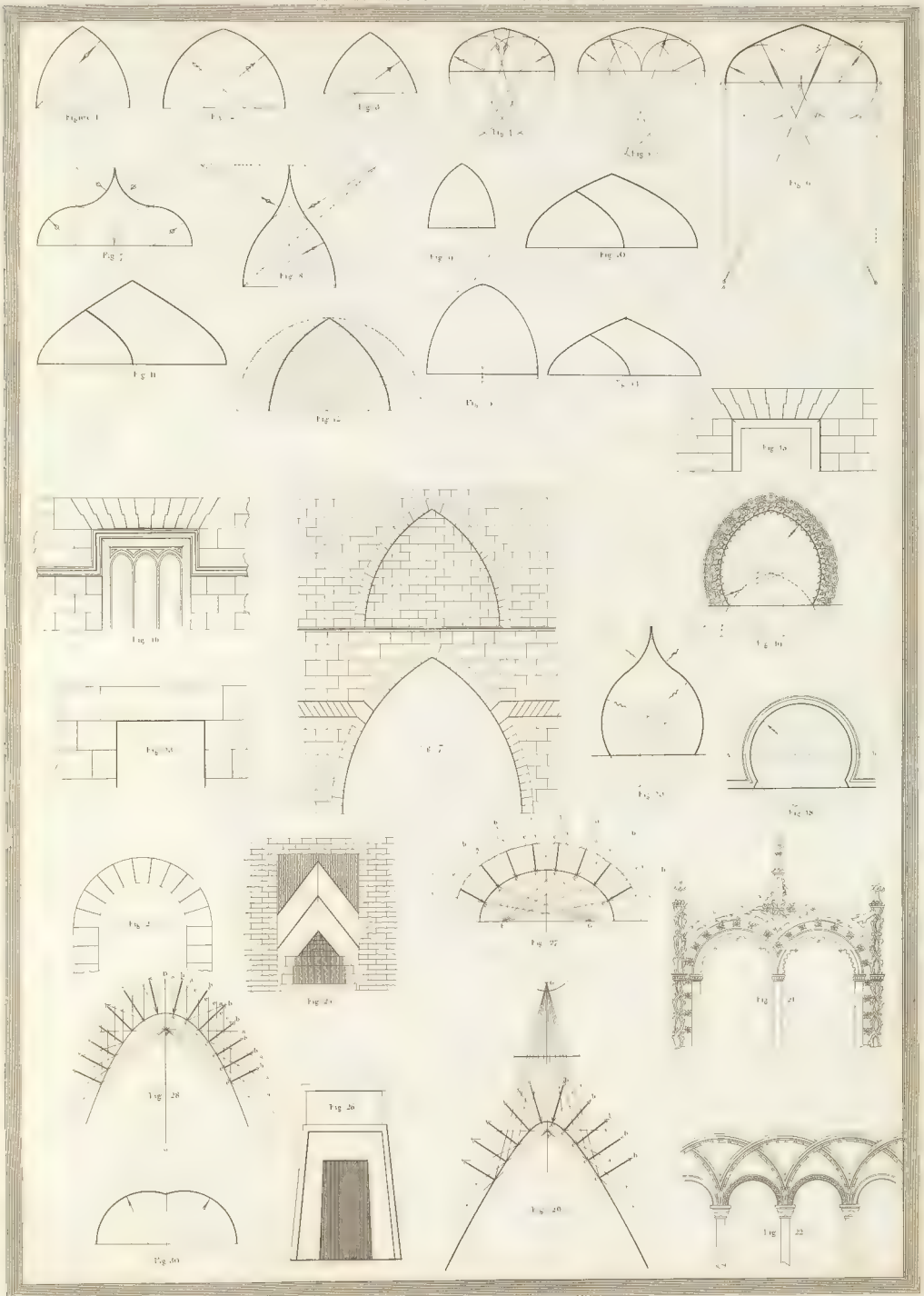
The building, conſidering its age, is in good preſervation, and has ſuffered very little from the uſual injuries of the elements; owing to the durability of the materials, and the ſerenity of the climate. Some parts, however, have been damaged by the fatal earthquake of 1745, and the ſpire that crowned the Mauſoleum of the founder (King John I.) was entirely deſtroyed by that diſaſter, but fortunately, in its fall, did not hurt any part of the inſide. This ſpire has not been rebuilt; the other parts of the Mauſoleum which received moſt injury, have been decently repaired in their former ſtyle, through the munificence of His Moſt Faithful Majeſty the late King, Joſeph I. Some of the pinnacles, and parts of the railing of the Church, were alſo thrown down, or deranged, at the ſame time; and had not been replaced when theſe obſervations were made, in 1789. This however we muſt attribute, not to any neglect on the part of the Fathers, but to the poor revenue of the Convent; for, to do them juſtice, they hold this edifice in great veneration, and, as far as circumſtances will allow, are careful in repairing and cleaning it. They cannot, indeed, completely repair paſt damages, but they uſe every precaution in their power againſt future ones.

* Colonel Tarant, and Captain Broughton.

In the Church belonging to this Monaſtery, we obſerve none of thoſe trifling and ſuperfluous ſculptures, which but too often are ſeen to crowd other Gothic edifices. Whatever ornaments are employed in it, are ſparingly, but judiciouſly diſpoſed; particularly in the inſide, which is remarkable for a chaſte and noble plainneſs; and the general effect, which is grand and ſublime, is derived, not from any meretricious embelliſhments, but from the intrinſic merit of the deſign. The forms of its mouldings and ornaments, are alſo different from thoſe of any other Gothic building that I have ſeen. This difference chiefly conſiſts in their being turned very quick, and cut ſharp and deep; with ſome other peculiarities, which the plates of this work will ſufficiently explain. Throughout the whole are ſeen a correctneſs and regularity, which evidently appear to be the reſult of a well conceived original deſign; it is equally evident that this deſign has been immutably adhered to, and executed in regular progreſſion, without thoſe alterations and interruptions to which ſuch large buildings are commonly ſubject.

Theſe and other conſiderations equally intereſting, induced me to meaſure and delineate the whole, with as much accuracy as poſſible; which I completed in thirteen weeks; during which time I lodged and boarded in the Convent. I am happy in this opportunity of returning my moſt ſincere thanks to the Prior, the *Hoſpedeiro Mor*, and the reſt of the Fathers of Batalha, for the politeneſs and attention they conſtantly ſhewed me. The piety, hoſpitality, and ſimplicity of theſe reverend Fathers, can ſcarcely be imagined in theſe degenerate times; they call to our recollection the deſcription hiſtorians give us, of the Chriſtians of the Apoſtolic ages; their ſanctity of manners increaſes the dignity of the venerable manſion they inhabit.

I cannot conclude without acknowledging my obligations to the Right Honourable William Conyngham, by whoſe munificence I have been enabled to carry on this work. The Portugueſe have too much gratitude, not to add their acknowledgments to him alſo, for having made known the merits of this inimitable ſtructure. Till now, no part of it, ſo far as I could learn, has ever been publiſhed. The honour of preſenting it to the world, was reſerved for a private Gentleman, a native of Ireland, who, induced by no other motive than a love of the fine Arts, and a wiſh for the advancement of Science, has expended upwards of One Thouſand Pounds, in reſcuing this noble edifice from the obſcurity in which it has lain concealed for ages.---I have taken the liberty to dedicate this Work to him, in conſideration of his exemplary liberality, and as an humble teſtimony of my everlaſting gratitude and reſpect.



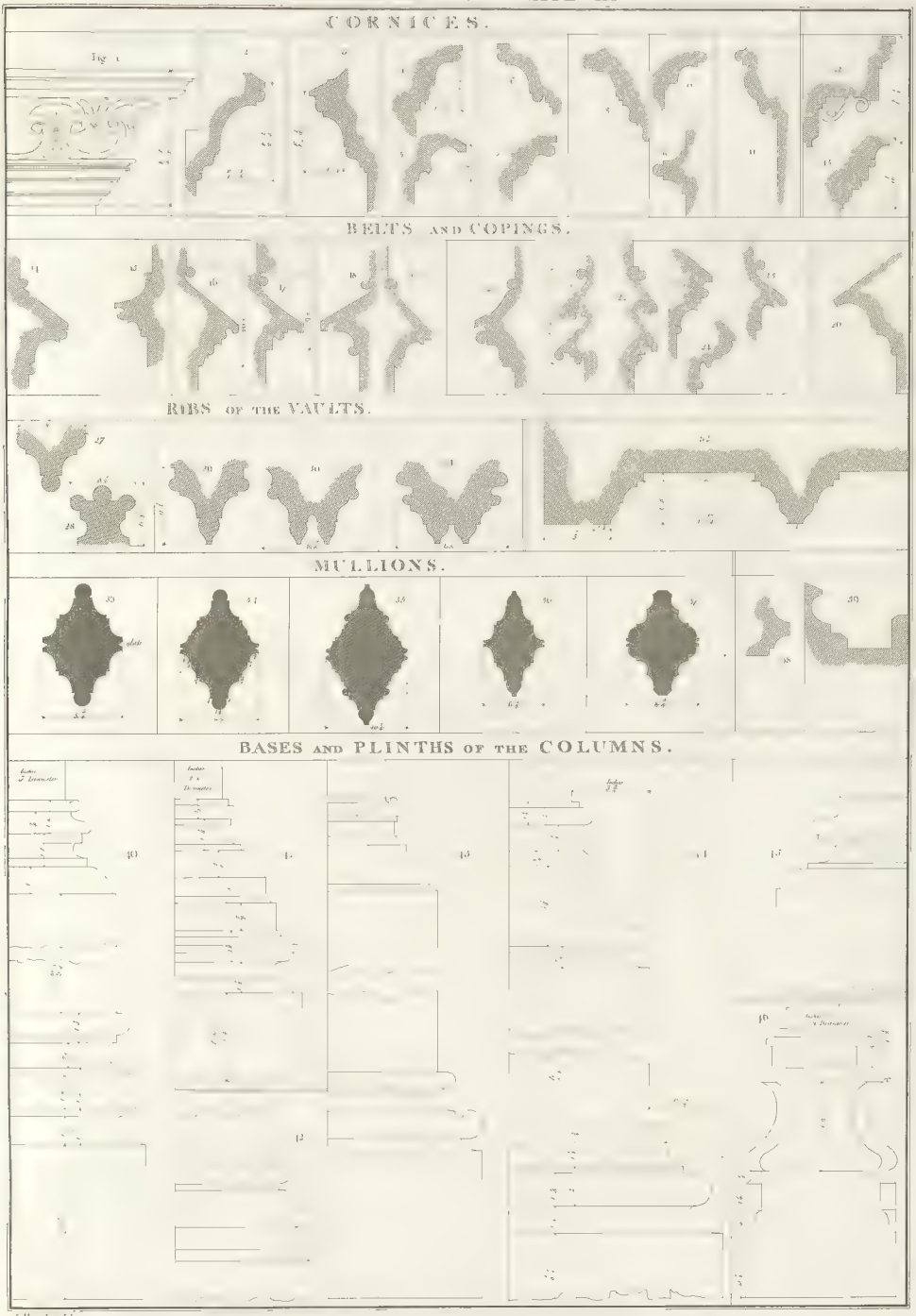
Murphy del.

Lowry sculp.

ARCHES · OF · VARIOUS · KINDS:

FRAGMENTS OF GOTHIC ARCHITECTURE.

INTRODUCTION PLATE III.



FRAGMENTS OF GOTHIC ARCHITECTURE. BATALHA.

RELIGIOUS CUSTOMS OF THE 13.th CENTURY.

INTRODUCTION.

WHILST the remains of the edifices of ancient Greece and Rome, have been meaſured and delineated with the greateſt accuracy, by many perſons well qualified for the taſk, very few have directed their enquiry towards the principles of that ſtyle of architecture called Gothic. This neglect may, in a great meaſure, be attributed to a prejudice ariſing from a miſtaken notion of its having originated with a tribe of barbarians, from whom nothing excellent could be expected; but there is no reaſon to ſuppoſe, that they have any claim to the invention of that elegant ſpecies of it which is exhibited in the following work. This ſpecies is allowed by the moſt competent judges, to have originated with the Normans, towards the concluſion of the twelfth century, and is generally known by the name of the Modern Norman Gothic.

Many ingenious men, who have carefully examined the beſt churches executed in this ſtyle, allow they are highly deſerving of attention, whether we conſider them as veſtiges of art, or as monuments of the induſtry and manners of former ages. An eminent Artiſt of the preſent time, who is very competent to judge of their merit, remarks that, "to thoſe uſually called Gothic Architects, we are indebted for the firſt conſiderable improvements in conſtruction; there is a lightneſs in their works, an art and boldneſs of execution, to which the ancients never arrived, and which the moderns comprehend and imitate with difficulty." *

Theſe circumſtances might be conſidered as ſufficient inducement to inveſtigate the principles on which thoſe edifices are built, but they have other claims to our notice. No other mode of building is ſo well calculated to excite ſublime and awful ſenſations; and if we admire the heathen temples of ancient Greece and Rome, becauſe they awaken theſe emotions in us, we muſt ſurely eſteem theſe Chriſtian temples, as they certainly produce that effect in a ſuperior degree, though, in the conſtruction of moſt of them, nothing is uſed but the mere produce of the quarry. Of this we have a ſtriking inſtance in the church of Batalha, which is formed out of as ſimple materials as the great pyramid of Egypt; yet the ſimplicity of its matter, but augments the graceſulneſs of its appearance.

* Sir William Chambers on Civil Architecture, page 24, third edition.

When we conſider the difficulty the Architects of theſe edifices had to contend with, from the ignorance of the times, and the debaſed ſtate of every Art and Science, we muſt confeſs they had more merit than is generally allowed them; for, notwithſtanding theſe powerful barriers, their works diſcover ſigns of mathematical knowledge, of philoſophical penetration, and of religious ſentiments, which future generations may perhaps ſeek for in vain, in the productions of the Architects of this enlightened age.

The earlieſt ſpecimens of this manner of building in England were, I believe, finiſhed about the beginning of the thirteenth century; and though, perhaps, not conſtructed in imitation of any ancient models, were carried to a greater pitch of excellence in leſs time, than hiſtory records of any other ſpecies of Architecture; and may be mentioned as remarkable inſtances of the vigorous exertions of the human mind, in the early ſtages of an art. It muſt however be expected, that ſome defects are to be found in theſe edifices, as perfection, in any art, is a plant of ſlow growth. But if this mode of building had ſtill continued to be cultivated, with that ardour which marked its progreſs in this country, a little before the period of its final diſſolution; improved by the aſſemblage of various ſcattered perfections, and graced by emanations from the kindred arts, what excellence might we not reaſonably expect to have ſeen it brought to, when the excreſcences, and inelegancies, of ruder times, would have been lopped off by the hand of taſte.

The following work exhibits one of the beſt ſpecimens exiſting of the Gothic ſtyle, in which I have attempted to follow the manner practiſed by former artiſts, with ſo much ſucceſs, in deſcribing and delineating the ancient edifices of Rome; and though it cannot be expected that this ſingle ſpecimen, however excellent, will be ſufficient to aſcertain completely the principles on which Gothic Edifices are built, yet, I truſt that it will help to develop thoſe intricacies of conſtruction, which no one has hitherto attempted to explain, and that with the aſſiſtance of other attempts of the ſame nature, we may be led to comprehend the myſterious rules of the Reverend Fathers who are ſuppoſed to have been their Architects.*

The writers who have hitherto treated on this ſubject, have principally directed their attention to the POINTED ARCH, which they ſeem to conſider as the leading

* Bentham's Ely, p. 27.——Monſieur Felibien, ſpeaking of the Architecture of the Sixth Century, ſays, "In conſtructing the different edifices I have mentioned, they employed no workmen ſcarcely but maſons, who had no further knowledge of the ſcience than the practice of preparing the mortar well, and of chooſing good materials; in which, indeed, they took ſuch precaution, that nothing can be more ſolid than their works. I do not, however, rank ſuch perſons among the number of Architects. I believe that there were very few lay-men deſerving this title under our firſt kings, as moſt of them were at that time occupied in what related to the profeſſion of war, leaving to the churchmen the care of cultivating the Sciences, and the fine Arts. What ſtrengthens this opinion reſpecting Architecture, is, that in France the firſt monks worked themſelves in building their monaſteries, employing the moſt intelligent of their community to conduct theſe works, without the aſſiſtance of the laity; nay, even the ſuperiors were often at the head of their monks, to give the deſigns, and to trace the form in which the ſtones were to be cut. This employment was ſo far from degrading the eccleſiaſtic dignity, that many of the biſhops thought it an honour to be reputed the architects, and overſeers of the churches which they built, imitating in that reſpect, the High-prieſts of the Jewiſh law, who, it is ſaid, employed themſelves in building and repairing the Temple of Jeruſalem."

Entretiens ſur la vie des Architectes, tom. v. p. 167.

characteriſtic of this ſpecies of Architecture. Many diſquiſitions have been written concerning its origin, but it ſtill remains unexplained. I have beſtowed much thought on this part, and flatter myſelf, that though the conjectures I am now about to offer reſpecting its origin are entirely new, they will upon mature conſideration, be allowed to approach as near to certainty as the nature of the ſubject will admit.

If the Pointed Arch be conſidered detached from the building, its origin may long be ſought for in vain, and indeed I imagine that this is the reaſon it has eluded the reſearches of ſo many ingenious men; but, on the contrary, if we examine it in a relative view, as a part in the compoſition of the whole, it will become more eaſy to account for its form, or for that of any other component part. If we take a comprehenſive view of any of theſe ſtructures externally, we ſhall perceive that not only the arch, but every vertical part of the whole ſuperſtructure terminates in a point. And the general form, if viewed from any of the principal entrances, (the ſtation from whence the character of an edifice ſhould be taken) will be found to have a pyramidal tendency. The Porticos of the firſt ſtory, whether they be three, or five in number, are reduced to one at the top, and this is ſometimes crowned with a lofty pediment, which might more properly be called a pyramid, as we ſee in the tranſept front of Weſtminſter Abbey, and York Minſter. If we look further on, in a direct line with its apex, we frequently ſee a lofty ſpire, or pyramid, riſing over the interſection of the nave and tranſept. Each of the buttreſſes and turrets is crowned with a ſmall pyramid. If niches are introduced they are crowned with a ſort of pyramidal canopy. The arches of the doors and windows terminate in a point; and every little acceſſory ornament, which enriches the whole, has a pointed or angular tendency. Spires, pinnacles, and pointed arches;* are always found to accompany each other, and very clearly imply a ſyſtem founded on the principles of the Pyramid.

It appears evident, from theſe inſtances, that the pyramidal form actually exiſts throughout the ſeveral component parts, and the general diſpoſition of the edifice, approaches as near to it, at leaſt, as the ordonnance of an hiſtorical painting which is ſaid to be pyramidally grouped. Hence we may comprehend the reaſon why the arch was made pointed, as no other form could have been introduced with equal propriety, in a pyramidal figure, to anſwer the different purpoſes of uniformity; fitneſs; and ſtrength. It is in vain, therefore, that we ſeek its origin in the branches of trees; or in the interſection of *Saxon* or *Grecian circles*; or in the perſpective of arches; or in any other accidental concurrence of fortuitous

* "As for ſpires and pinnacles with which our oldeſt churches are ſometimes, and more modern ones are frequently decorated, I think they are not very ancient. The towers and turrets of churches, built by the *Normans* in the firſt century after their coming, were covered as platforms, with battlements or plain parapet walls. Some of them indeed, built within that period, we now ſee finiſhed with pinnacles or ſpires, which were additions ſince the modern ſtyle of pointed arches prevailed, for, before we meet with none. One of the earlieſt ſpires we have any account of, is that of old St. Paul's, finiſhed in the year 1222, it was, I think, of timber covered with lead; but not long after they began to build them of ſtone, and to finiſh all their buttreſſes in the ſame manner."——Bentham's Ely, p. 40.

circumſtances. The idea of the pointed arch ſeems clearly to have been ſuggeſted by the Pyramid, and its origin, muſt conſequently be attributed, not to accident, but to ordination.

But granting for a moment that any of the above mentioned conjectures were true, we ſhould be as far as ever from aſcertaining the principles of theſe edifices. There never was a ſpecies of Architecture the properties of which could be determined from the arch alone. Even in the Gothic, where it forms ſo conſpicuous a part, it does not govern in the compoſition, but follows the general order of things, as it is not a cauſe, but a concomitant part, and its pointed termination is a conſequence ariſing from a general actuating principle.

Whether the Gothic Architects were the inventors of this Arch, or borrowed the idea of it from others, is not eaſy to determine; but it is very reaſonable to ſuppoſe that it originated with themſelves, as they were the only ſcientific builders known to have uſed the pyramidal figure in the compoſition of their edifices, except the Egyptians; * and it is generally ſuppoſed that the latter were ignorant of the art of conſtructing arches, though, in other reſpects, an ingenious people. But the Gothic Architects, in uſing this Arch, did no more, in my opinion, than the Greeks or Romans would have done in ſimilar circumſtances. For, if we ſuppoſe for a moment, that an Athenian Artiſt of the age of Pericles, or a Roman Architect of the Auguſtan age, had been called in to finiſh a Gothic ſtructure that had neither doors nor windows, he could not, I think, have introduced any other but a Pointed Arch, in an edifice where every part grew up to a point, without being guilty of a direct violation of the laws of art, and of the precepts ſo ſtrongly inculcated in the Architecture of his own country.

The rule obſerved by the Gothic Architects, of adapting the form of the arch to the general figure of the edifice, is I believe, conſonant with the cuſtom of the ancients, though I cannot find that any writer, ancient or modern, has taken notice of this circumſtance. The Grecian temples, which were chiefly of an oblong form, have their doors and windows terminated horizontally, in all the deſigns that I have ſeen of the ruins of that country; ſome exceptions may perhaps be found, but I believe they never occur, except where propriety was made ſubſervient to convenience.

* The maſons of ancient Egypt, though unacquainted with the art of forming an arch, as ſome will have it, cloſed both the internal and external apertures of their Pyramids in a manner that reſembled, as near as poſſible, a pointed Arch.—"In the gallery or narrow paſſages in the great Pyramid of Gize, and in the two rooms of that which is opened at Sacara, the vault over head is formed by the gentle projection of the ſtones, one above another, till they approach to near a point at the centre."——Remarks on Prints by Richard Dalton, Eſq. p. 54. See the view of the entrance into the great Pyramid, in Sandy's Travels, p. 130.

The Romans, who indulged in a greater variety of forms, furniſh us with many examples wherein this principle of uniformity is obſerved; the doors and windows of their quadrangular edifices being, generally ſpeaking, cloſed horizontally in the manner of the Grecians, and the apertures of their rotund edifices terminated with ſemi-circular arches, as we ſee in the Amphitheatre at Verona, and in the Coliſeum, the Theatre of Marcellus, the Temple of Bacchus and Faunus at Rome, &c.* To which uniformity theſe buildings are indebted for a great part of their beauty. Of this the author of the ingenious Inquiry into the Origin of our Ideas of the Sublime and Beautiful,† appears to have been perfectly ſenſible. "It is in a kind of artificial infinity;" (he ſays) "I believe we ought to look for the cauſe why a rotund has ſuch a noble effect. For in a rotund, whether it be a building or a plantation, you can no where fix a boundary; turn which way you will, the ſame object ſtill ſeems to continue, and the imagination has no reſt. But the parts muſt be uniform, as well as circularly diſpoſed, to give this figure its full force; becauſe any difference, whether it be in the diſpoſition, or in the figure, or even in the colour of the parts, is highly prejudicial to the idea of infinity, which every change muſt check and interrupt, at every alteration commencing a new ſeries."

Indeed, there is no ſpecies of Architecture that has the leaſt claim to excellence, wherein this uniform conſent of parts, has not been conſidered as indiſpenſably neceſſary to the general effect and harmony of the compoſition. We even find it obſerved in thoſe ſimple ſtructures of the Egyptians, that reſemble a fruſtum of a pyramid;‡ which ſtructures probably firſt ſuggeſted the idea of doors with oblique ſides, narrower at the top than at the bottom, as deſcribed in the ſixth chapter of the fourth book of Vitruvius. Doors of this ſort, having fitneſs to recommend them, in a building of that kind, as well as convenience, on account of their ſhutting themſelves, a property they derive from the nature of their figure, were wiſely adapted in thoſe artleſs times, and would be equally proper now, if ſimilar reaſons ſhould juſtify their reſtoration.§

Upon the whole, if the form of the arches, employed in cloſing the apertures of a regular edifice, contributes in any degree to the effect and harmony of the compoſition; it is probable, that the order here aſſigned to each, appears the moſt natural, and the moſt conſiſtent with the rules of fitneſs and uniformity; that is to ſay,

A pointed arch, in a pyramidal ſtructure.‖

An horizontal arch, (if the term be allowed) in a ſquare or oblong building;¶

And a ſemi-circular arch in a rotund.**

* See Deſgodetz, p. 28, 32, 110, 124, 127, and 139.

The Pantheon, one of the nobleſt monuments of antiquity, cannot be brought as a fair exception to this rule, on account of the various alterations it has undergone, by rebuilding and repairs, after the greateſt part of its original members were deſtroyed by fire. Vide l'Architettura di Sebaſtiano Serlio, lib. 3. cap. 4.

† Page 133.

‡ See Fig. 26. plate 1. Introduction. See alſo Norden's travels, plate 101. vol. 2.

§ The late Mr. Stuart has, not injudiciouſly, introduced one of theſe doors at the entrance of the new Chapel of the Royal Hoſpital at Greenwich, with an obliquity leſs than taught by Vitruvius.

‖ Like fig. 1, 8, 9, 12, 13, in plate 1. Introduction.

¶ Fig. 15 and 16. ** Fig. 24.

Whatever merit theſe different arches may poſſeſs, abſtracted from their properties of ſtrength, they ſhew it to moſt advantage by this arrangement; but, on the contrary, if this arrangement were tranſpoſed, the incongruity reſulting from ſuch a diſcordant compoſition would be ſo apparent, as to deſtroy the effect of the whole edifice.

The Gothic Architects appear to have been no ſtrangers to the propriety of the preceding ordinance, as is manifeſt from the various kinds of arches they employed, to coincide with the contingent forms of their buildings; and whoever ſhould undertake to determine their ſtyle of Architecture, from the pointed tendency of the arch alone, would not always be correct in his deciſion. Their beſt Artiſts made it a rule, to adopt the arch that was moſt congenial in its form to the figure of the edifice. The ſemi-circle was therefore excluded, becauſe their ſtructures were never round: but where the aſpect of the edifice was horizontal, the apertures alſo were cloſed horizontally.

The Refectory at Batalha,* which is not an inelegant ſpecimen of Gothic Art, furniſhes us with a ſtriking example of this nature, that enables us to reaſon on facts. The general Figure of the plan, and of the elevation, of this Refectory, is nearly like that of a low Grecian Pavilion, and all its apertures, without exception, are cloſed in the Grecian manner;† but if each of its buttreſſes, inſtead of terminating under the cornice, had been carried above the railing and crowned with a pinnacle, and the ends, if finiſhed, with ſharp pointed gables, its apertures, in that caſe, I conceive, would not have been cloſed horizontally, but with a pointed arch, ſomewhat ſimilar to thoſe of King's College Chapel, at Cambridge. Hence it appears, that it was propriety, and not caprice, that influenced the Gothic Architects in cloſing the apertures of their edifices; and that a building may be in the true ſtyle of the modern Norman Gothic, without poſſeſſing a ſingle pointed arch.‡

Some examples, I am aware, may be pointed out among the Greeks and Romans, of a practice contrary to what is here laid down; but theſe exceptions are merely accidental, or introduced through neceſſity, which often excludes all other conſiderations.

Among ſuch a number of Architects,§ as flouriſhed during the continuation of the Greek and Roman empires, there muſt, no doubt, have been many, who were ignorant of the true principles of this complicated art;¶ and, from the deſigns of ſuch perſons, we cannot with propriety draw affirmative concluſions, nor conſider their works in any other view, than as monuments of errors; and no errors, however ancient, or however countenanced by long practice, are fit objects of imi-

* See the plate of the Weſt Elevation of this Refectory.

† See fig. 23, plate 1. Introduction.

‡ Buildings of certain kinds may be in the true M. N. Gothic Style, without pointed Arches, but churches cannot, for reaſons which will be ſhewn hereafter.

§ Vegetius ſays, that in his time 700 Architects were computed at Rome.

¶ Vitruvius, in Proem to B. iii. and B. vi. mentions, that there were many in his time profeſſing themſelves Architects, who were ignorant, not only of the found principles of Architecture, but of every thing relating to building.

tation. If rules were laid down for determining, with preciſion, what ancient monuments are of the true ſtandard principle of correctneſs, they would greatly contribute to accelerate the progreſs of Architecture. But, to aſcertain ſuch rules, would require the qualifications of the Philoſopher, united with thoſe of the Artiſt. He, whoſe mind is enlightened by theſe reaſoning powers, knows how to ſtamp a juſt value upon works of real merit, and to reject any excreſcence that "Old Time," as Milton ſays, "with his huge drag-net, has conveyed down to us along the ſtream of ages."

EXPLANATION OF THE SEVERAL ARCHES

IN PLATE I.—INTRODUCTION.

Fig. 1. THE common pointed arch.*

Fig. 2. An arch of the third point. This arch is uſed in many parts of the church of Batalha. In the ſide elevations of churches it has an agreeable appearance, as being an equation between the high pointed and low arch.

Fig. 3. A ſection of the common pointed arch. Fig. 1.

Fig. 4. Fig. 5. and Fig. 6. Pointed ſcheme arches.
The points from whence the upper parts of Fig. 6. are formed, are found thus: Divide the circumference of one of the circles into ſix equal parts; from 1 to 4 of theſe diviſions, draw the indefinite right line 1 4 *b*, and where it interſects the line *c b*, as at *b*, drawn perpendicular to the baſe line *c* 6, will be the point required for deſcribing the portion of the arch from 1 to *e*; the reſt is plain by inſpection.

Fig. 7. and Fig. 8. Pointed arches, of contrary flexion.

Fig. 9. Segments of an Ellipſis.

Fig. 10. Segments of the Parabola.

Fig. 11. Segments of the Hyperbola.

Fig. 12. Is the Quadratrix of Dinoſtratus.

Fig. 13. Segments of the Cycloid.

Fig. 14. Segments of the Catenarian Curve.

Fig. 15. and Fig. 16. Horizontal arches. The former is taken from the Convent of the Church of the bleſſed Conception at Beja, where D. Duarte, the ſon of John the Firſt, the founder of Batalha, is interred. The latter is copied from a Gothic ruin at Evora, both in the Province of Alem-tejo, in Portugal.

* The manner of forming this, and the ſubſequent pointed arches, is ſhewn by the lines and indexes of the reſpective figures.

Fig. 17. This arch, with its lateral and upper reſiſting arches, may be ſeen in Weſtminſter Abbey, at the interſection of the nave and tranſept; a ſpecimen of Gothic ingenuity, perhaps, not unworthy of notice.*

All the above arches properly belong to that ſpecies of Architecture called modern Norman Gothic; but there are ſix of them, viz. Figures 9, 10, 11, 12, 13, and 14, the exiſtence of which I have not been able to aſcertain by antecedent examples. However, I am averſe from ſuppoſing, that the Gothic Architects were ſtrangers to Figures 9, 10, and 11. The arches that ſupport the ſpire of the Church of St. Nicholas, at Newcaſtle, as well as thoſe introduced by Sir Chriſtopher Wren, in the ſpire of St. Dunſtan in the Eaſt, are, I think, either of the parabolic, or of the hyperbolic ſpecies. Theſe arches, whether recommended by ancient practice or not, poſſeſs many valuable attributes, which, together with their aptitude and fitneſs for Gothic Architecture, invited me to introduce them here.

Fig. 18. The Creſcent, or Mooriſque arch.

Fig. 19. A Mooriſque pointed arch.

Fig. 20. A Mooriſque pointed arch of contrary flexion. Theſe three arches may be ſeen at the Puerta de los ſiete ſuelos, and at the Torre de las dos Hermanas.—Alhambra†

Fig. 21. A window in the Arabian ſtyle of Architecture, ſketched from the Royal Palace at Cintra, near Liſbon.

Fig. 22. Saxon arches.

Fig. 23. The manner in which the Egyptians and Grecians cloſed the apertures of their quadrangular edifices.

Fig. 24. The Semi-circular arch often uſed by the Romans, particularly in their rotund buildings.

Fig. 25. The *Dos d'Ane* arch, uſed by the Egyptians, in the vaulting of the galleries, and ſepulchral chambers of their pyramids. See Norden's Travels, plate 49 and 50.

Fig. 26. A fragment of an Egyptian building at Carnac; ſee Norden's Travels, Vol. I. where many remains of Egyptian edifices are ſhewn, with the ſides inclining inwards, like the ſide of a baſtion. Doors narrower at the top than at the bottom, as repreſented in this figure, probably originated with theſe, or ſimilar ſtructures.

Fig. 30. This is a non-deſcript. I ſhall call it the Ulnar Arch. It is generated by the arms of a man extended at full length, with his breaſt placed againſt a ſmooth wall, and marking, with a piece of chalk held in each hand, the revolution of the arms, moving inflexibly upwards, till the hands meet in

* The ſubtenſe of half this Arch, appears to be equal to the interval between the pillars, and is the weakeſt manner of forming a Gothic Arch. The ratio of its ſtrength, being to the ſtrength of a ſemi-circular Arch of equal ſpan, as 10 is to 13. The Architect appears to have been ſenſible of this weakneſs, by the manner in which he has guarded againſt the incumbent weight.

† Vide Antiguedades Arabes de Grenada y Cordoba.

a point vertical with the crown of the head. In the chancel of Elkſtone church, in the county of Glouceſter, there is an arch of Saxon workmanſhip, apparently generated after this manner; but ſuch arches ſhould not be employed, I imagine, except in vaults where a number of ribs, ſpringing from the ſides, converge to one centre. The inverted angles at the top ſhould then be concealed by a pendent orb richly ornamented.

How to find the Joints of any Arch formed of Segments of the Ellipſis, Parabola, *or* Hyperbola.

PROBLEM I. *Of the Ellipſis.* (Fig. 27. Plate I.)

From the focus point F, of the Ellipſis, draw as many right lines Fe, as there are joints required in the arch, and from G, the other focus point, draw the lines Ga, Ga, &c. which ſhall cut the former lines at the points c.c. Biſect the ſeveral angles a c e, and you have c b, the joints required.

PROBLEM II. *Of the Parabola.* (Fig. 28.)

From the point F, the focus of the Parabola, draw lines Fa, Fa, through as many points (c.c) in the arch as there are joints required, and from the points c.c, where theſe lines interſect the arch, draw ce, ce, &c. parallel to the axis of the ſection GD. The lines bc, bc, which biſect the ſeveral angles e c a, will then be the true joints of the parabolic arch.

PROBLEM III. *Of the Hyperbola.* (Fig. 29.)

Let F and G, be the focus points of two oppoſite Hyperbolas given in poſition, from the focus G, draw lines through the ſeveral joints (c.c) of the arch, and through each of the points where they interſect the arch, as at c.c, &c. draw Fa, Fa, proceed, as in the two former problems, to biſect the angles a c G, and you will determine the joints required.

OF DOMES.

THE above problems, eſpecially the two latter, will be found of great uſe, wherever arches of the parabolic or hyperbolic kind are required; their properties are well known to every mathematician, and their utility in conſtruction univerſally admitted, particularly in magnificent domes, and in ſituations where great weight is to be ſuſtained without much lateral reſiſtance: they have alſo the advantage

of requiring no centring, or at leaſt not ſo much as the arches in common uſe *. The claim of Sir Chriſtopher Wren to the firſt rank in his profeſſion, depends more, perhaps, upon his knowledge of the properties of theſe curves, than upon all his other attainments in architecture. Hence he was enabled to deſign and execute the ſuperb cupola of St. Paul's, one of the nobleſt ſpecimens of conſtruction exiſting, and the chef-d'œuvre of this Artiſt. This edifice, if deprived of that noble feature, would have very little remaining, beſides the weſtern portico, that any ingenious Architect of this age would be ambitious to own; and the church of St. Dunſtan in the Eaſt would have few admirers, were it not for the geometrical ingenuity of its ſpire.

In that branch of architecture which relates to conſtruction, Sir Chriſtopher Wren may be conſidered as equal, if not ſuperior, to any Artiſt that has appeared in Europe theſe two hundred years; and what contributed not a little to give him this ſuperiority, was his living in an age enlightened by the genius of a Newton, a Leibnitz, a Huyghens, &c. His mind was enlarged by the ſublime diſcoveries of thoſe great philoſophers; he was one of the firſt geometricians of the age †; and if to his knowledge in mathematical ſcience, he had united, in an equal degree, the true principles of the art of deſign, the world, for the firſt time, would have ſeen a complete Architect.

Since the death of that great man, the art of conſtruction has been much neglected in England; and perhaps there are but very few recent ſpecimens of it in Europe, of bold execution, beſides the cupola of St. Genevieve at Paris. Yet, it is remarkable, that four of the greateſt Architects that have appeared ſince the reſtoration of the arts, are chiefly indebted, for their fame in this art, to their knowledge of conſtruction. Theſe were Filippo Brunelleſchi ‡, Michael Angelo, Jacques Germain Soufflot §, and Sir Chriſtopher Wren. To the firſt we owe that ſtupendous machine, the cupola of the church of S. Maria del Fiore, one of the moſt aſtoniſhing and difficult performances in Europe, being in magnitude not inferior to any thing of the kind, perhaps, the ancient world ever ſaw. The knowledge of conſtruction gradually declined in Italy, by the death of the old Gothic Architects, and finally expired with Arnolfo Lappi, who began this church according to the Gothic rules; this prevented the completion of its cupola for upwards of a century, during which time, there was not to be found in Florence, nor throughout all Italy, any Architect who would undertake to finiſh it. This arduous taſk was reſerved for the genius of Brunelleſchi, who has rendered his name memorable in the hiſtory of

* "The concave" of St. Paul's "was turned upon a centre, which was "judged neceſſary to keep the work even and true, though a cupola might be "built without a centre: but this is obſervable, that the centre was laid without "any ſtandards from below to ſupport it, and as it was both centring and "ſcaffolding, it remained for the uſe of the painters."——Parentalia, p. 291.

† In the Philoſophical Tranſactions, No. 48, there is a ſolid figure, whoſe generation is given by Sir Chriſtopher Wren. Two oppoſite hyperbolæ are joined by the tranſverſe axis, and through the centre there is a right line drawn at right angles to that axis; then the hyperbolæ are ſuppoſed to revolve; by which revolution a body will be generated, which he calls an *Hyperbolic Cylindroid*, whoſe baſes, and all ſections parallel to them, will be circles. And, in No. 53 of the Philoſophical Tranſactions, he applies it to the grinding of hyperbolical glaſſes; and he ſays, they muſt be either formed this way, or not at all. There are many more of his ingenious mathematical productions noted in Parentalia.

‡ See Vaſari, delle Vite di Arch.

§ See D'Argenville, Vies des Arch

the arts, by the execution of that cupola; which Lappi, who began the work, would have conſidered as a ſimple operation, and would, as M. Felibien * juſtly obſerves, have finiſhed it, had he lived, with more eaſe than Brunelleſchi, though he had been poſſeſſed of all the rules of the ancient Greek and Roman Architects.

But Filippo Brunelleſchi, however great his merit may have been, has no title to the invention of the modern manner of building cupolas; for this we are indebted to Anthemius and Iſidorus, the two celebrated Architects who, by order of the Emperor Juſtinian, built the preſent Santa Sophia†, at Conſtantinople; and to prevent its deſtruction by fire, as had already happened four ſeveral times, they employed no combuſtible materials in its fabrication. From this epoch we may date the origin of cupolas reſting upon the four pillars of a ſquare, which ſquare is gradually formed into a circle by pendentives ‡; an idea ſuggeſted by the figure of the croſs repreſented in the plans of all Chriſtian churches. The veneration in which this church has long been held, and the advantages which appeared to reſult from its new mode of conſtruction, are ſo great, that it has ſince been imitated by all the nations of Europe §. The Venetians were the firſt who ſet the example to the Italians, by erecting the church of Saint Mark, at Venice, upon a ſimilar plan, about the year 973 ‖. Saint Mark's, together with the cathedral of Piſa, built after the ſame model at the commencement of the eleventh century, probably ſupplied Brunelleſchi with much information in the conſtruction of the cupola of Santa Maria del Fiore, which laſt Michael Angelo appears to have copied, in the dome of that immenſe fabric St. Peter's at Rome.

Hence we are enabled to trace through *Gothic veſtiges*, the origin of thoſe ſtately Domes which crown the principal ſacred edifices of Europe; a mode of conſtruction, of which there is not a ſingle inſtance to be found among the remains of the buildings of ancient Rome, or of Greece; nor in thoſe of the Egyptians; nor in the writings of Vitruvius.

The Abbé Winckelmann does not appear to have inveſtigated this ſubject with his uſual care, or he would not have attributed the above invention to the ancient Greeks, without being able to refer to a poſitive inſtance to eſtabliſh the fact; his concluſion to this effect, reſts upon the authority of a piece of ſculpture which is upon an antique ſarcophagus found in the *Villa* Moirani ¶. But granting that this ſarcophagus bears the model of a temple, crowned with a ſort of cupola, the original

* Vie des Arch. par M. Felibien.

† Sophie, Sophia.—Sainte Sophie & ſes trois filles les Saintes Foi, Eſperance, & Charité, furent couronnées du martyre du temps d'Eumène, Evêque d'Alexandrie, qui tint le ſiege ſous les Empereurs Adrien & Antonin. L'Egliſe de Sainte Sophie étoit la grande Baſilique, ou l'Egliſe Patriarchale de Conſtantinople, batie par le grand Conſtantin & ainſi appellée, parce qu'elle étoit dediée, non pas à Sainte Sophie, mais à la Sageſſe Eternelle. Sainte Sophie eſt aujourd'hui la principale moſquée des Mahometans à Conſtantinople.—Vide Dic. de Trevoux.

‡ Pendentives are thoſe parts in the angles, between the arches of the nave, which ſpring from a point, and gradually advance in a concave direction to receive the circular entablature of the cupola.—Or, if you ſuppoſe a circle inſcribed within a ſquare, the curvilinear triangles cut off, will be the plans of the pendentives.——From the French *Pendentif*. See Explication des Termes d'Architecture, par le Sieur Daviller.

§ The cupola of Santa Sophia, which the Turks have ſtill preſerved, is near one hundred and thirteen French feet in diameter, according to the account of M. Grelot.

‖ Hiſtoire de la Diſpoſition que les Chrétiens ont donnée à leur Temples, par M. Le Roy.

¶ Remarques ſur l'Architecture des Anciens.

may, notwithſtanding, have reſted upon a circular baſe; for how is it poſſible to determine to the contrary, by any external repreſentation in painting or ſculpture *?

We may conceive ſome idea of the difficulty the moderns find in executing any bold deſign of this nature, by what we collect from the Life of M. Soufflot. This Artiſt, though one of the beſt that ever appeared in France, experienced more difficulty in conſtructing the cupola of the church of St. Genevieve, than in all the edifices that ever roſe beneath his direction. Notwithſtanding its weight, impulſe, and reſiſtance were aſcertained, and the whole demonſtrated to be perfectly ſecure by two able mathematicians, (M. Ganthey and the Abbé Boſſut) yet this was not ſufficient to ſcreen him from the malign criticiſm of cotemporary Artiſts, who maintained that the piers, upon which the cupola reſted, were inadequate to ſuſtain the incumbent weight. Time and experience, however, proved the reverſe; and when he was on the point of completing his project, the detraction of his enemies affected him ſo ſenſibly, that it is generally ſuppoſed he died of a broken heart.

M. Soufflot appears to have been very intelligent in the Gothic, as well as in the Grecian ſtyle of Architecture: to obtain a knowledge of the former, he viſited many of the beſt Gothic buildings in France, of which he made drawings, ſtudied their conſtruction, general proportions, vaults, &c. Hence he acquired much uſeful information, that materially aſſiſted him in the deſign and execution of the church of St. Genevieve. Sir William Chambers informs me, that when he was laſt in France, M. Soufflot ſhewed him a large collection of drawings he had made from thoſe edifices; at the ſame time he expreſſed his admiration at the excellence of the general proportions he diſcovered in them, and the ſuperior intelligence their Architects poſſeſſed in the laws of conſtruction.

In fine, the nobleſt monuments of Florence, Rome, Paris, and London, bear ample teſtimony of the great abilities of the above Artiſts, and in no part of theſe monuments are their talents more conſpicuous than in the conſtruction of the Domes. It is much to be regretted then, that this ſuperior branch of our art ſhould become neglected or unknown, and that more attention is not beſtowed on the ſound rules, and demonſtrative principles, upon which the art of conſtruction is founded †. The ſtudy of our Gothic edifices will be found, perhaps, to contribute very much to its reſtoration; but nothing can compenſate for the want of a thorough knowledge of ſtatics, and of conic ſections.

* The fact appears to be, that we are not warranted to conclude, from any exiſting model, that the ancients uſed any ſuch termination to their edifices as a cupola reſting on a ſquare baſement: their round temples, it is true, were often covered with a ſemicircular vault, to which they gave the name of *Tholus*, ſuch as that we now ſee in the Pantheon at Rome; but this form is very different from that which we have adopted from Santa Sophia, as may be ſeen by comparing the vault of the Pantheon at Rome with the dome of the Auguſtins' church in the ſame city.

† "It ſeems very unaccountable, that the generality of our late Architects "dwell ſo much on the ornamental, and ſo ſlightly paſs over the geometrical, "which is the moſt eſſential part of Architecture. For inſtance, can an arch "ſtand without butment ſufficient? If the butment be more than enough, 'tis "an idle expence of materials; if too little, it will fall; and ſo for any vaulting: and yet, no author hath given a true and univerſal rule for this; nor "hath conſidered all the various forms of arches."——Parentalia, 356.

OF SPIRES.

HAVING taken a ſhort review of the origin and progreſs of Domes, we ſhall next proceed to give a brief account of the origin of Spires; a ſubject of all others relating to architecture the leaſt underſtood. The obſervations I am about to offer on this ſubject, are different from any yet preſented to the Public; yet I truſt to make it appear, that the real intention of Spires, which has never been ſatisfactorily explained, is ſuch as I am about to ſubmit.

The Spire of Old Saint Paul's, ſays Mr. Bentham, is one of the earlieſt we have any account of; it was finiſhed in the year of our Lord 1222, and was in height 520 feet, according to Stowe's account *. The Spire of Saliſbury Church is 400 feet high †; and that of Straſburgh, built by the famous Irwin de Steinbach, is 450 feet ‡. No ſettled proportion ſeems to have been obſerved in the dimenſions of Spires in general; ſometimes the height did not exceed four times the diameter of the baſe, whilſt, at other times, the ratio of the height, to the breadth taken at the baſe, was as eight to one. We have an example of the laſt-mentioned proportion, in the Spires built by Hugh Lebergin upon the towers of St. Nicaſe, the two largeſt of which were 50 feet high, upon a baſe of ſix feet.

Notwithſtanding the amazing height to which many Spires were carried, they were conſtructed ſo exceedingly ſlight, that we ſhould be apt to conclude, on reaſoning from theory, that they would be inadequate to ſuſtain their own weight. The Spire of Saliſbury, for inſtance, is but ſeven inches thick; and that of Batalha is about the ſame thickneſs, independent of the emboſſed work, though almoſt a fourth part of its ſuperficies is perforated. Great care muſt conſequently have been taken, in ſelecting the materials employed in conſtructing ſuch light Spires, eſpecially as they are, I believe, in general connected without the aid of iron cramps; for this metal, when expoſed to air or moiſture, is ſubject to contract ruſt, which in time will ſhiver in pieces as much of the block as it comes in contact with. I am informed, that the ſtones of the Spire of Batalha are keyed together, by means of dove-tail wedges of pine-wood §: however that may be, it is pretty certain, that the ancients, upon ſimilar occaſions, have adopted this expedient. Alberti mentions his having found wedges or cramps of wood in the ancient Roman buildings; and M. le Roy has obſerved them in the ruins of an ancient temple in the diſtrict of Athens. In the ancient Temple of Girgenti in

* Wren's Parentalia, p. 274.
† Ibid. p. 305.
‡ Argenville, Vies des Arch. Diſc. p. 33, tom. I.

§ This circumſtance I was informed of after leaving Batalha, by an ingenious gentleman in the Portugueſe ſervice (Col. Audinot), who, from his ſituation, had frequent opportunities of viſiting that building.

Sicily, there were found wedges of wood, in good preſervation, after a ſpace of more than two thouſand years *. Cramps of copper were alſo uſed by the ancients in their buildings, which, according to the account of Father Montfaucon, were tempered to an extraordinary hardneſs †.

With reſpect to the origin of Spires, it appears very unaccountable, that neither hiſtory nor tradition have preſerved the leaſt remembrance of it. There muſt, nevertheleſs, have been ſome ſpecious motive for building them; for we can hardly conceive, that appendages ſo expenſive, and difficult of execution, were merely the reſult of caprice. If we examine the uſes to which the ſacred edifices wherein they are employed were appropriated in the 12th century, we ſhall diſcover a rational cauſe for crowning them with Spires: namely, the cuſtom of burying in churches, which about this time appears to have become general all over Europe ‡. Now, in conſequence of this cuſtom, there were united, in the ſame fabrick, a cemetery and a church §; it was highly proper, therefore, to build every ſtructure intended for this double purpoſe, in a ſtyle of architecture characteriſtic of its twofold deſtination. Impreſſed with theſe ſentiments, the Architects of thoſe times would naturally look back for precedents of a ſimilar nature among the nations of antiquity; the hiſtorians of theſe nations, as well as the remains of their edifices, would have ſhewn them, that it was invariably the practice of all civilized people, who believed in the immortality of the ſoul, and did not hold a republican form of government ||, to raiſe lofty pyramids over their cemeteries or places of ſepulture. The Gothic Architects, in like manner, have adopted that figure to characteriſe their cemeteries, and, at the ſame time, preſerved the figure of the croſs in their ground plan, the better to denote a Chriſtian temple.

Hence the origin of Spires, and the conſequent introduction of pinnacles, pyramidal or pointed arches, angular ornaments, &c.; in ſhort, every vertical part of the whole ſuperſtructure was henceforth terminated in a point. Indeed it could not be otherwiſe, conſiſtent with the true principles of deſign, which invariably

* Remarques ſur l'Architecture de l'ancien Temple de Girgenti en Sicile, par M. Winckelmann.

† Italian Diary, p. 54.

‡ "After the cruſado, King Henry built his church, but not by a model "well digeſted at firſt; for, I think the chapels without the aiſles were an "after-thought, the buttreſſes between the chapels remaining being uſeleſs, "if they had been raiſed together with them; and the King having opened "the Eaſt-end for St. Mary's Chapel, he thought to make more chapels for "ſepulture; which was very acceptable to the Monks, after licence obtained "from Rome to bury in churches, a cuſtom not uſed before."

Wren's Parentalia, p. 297.

§ Chriſtians, at all times, have had a great deſire to be buried near the Martyrs, and this introduced ſo many burying-places in the churches; though the cuſtom of burying no where but without the towns was long obſerved. The veneration for relics, and a diſtinct belief of the reſurrection, had totally taken from the Chriſtians the horror which the ancients, even the Iſraelites themſelves, had for dead bodies and burying-places.

Les Mœurs des Chrétiens, par l'Abbé Fleury.

He that looks for urns and old ſepulchral relics, muſt not ſeek them in the ruins of temples, where no religion anciently placed them. Theſe were found in a field, according to ancient cuſtom, in noble or private burial; the old practice of the Canaanites, the family of Abraham, and the burying-place of Joſhua, in the borders of his poſſeſſions; and alſo agreeable unto Roman practice, to bury by highways, whereby their monuments were under-eye-memorials of themſelves, and mementos of mortality unto living paſſengers; whom the epitaphs of great ones were fain to beg to ſtay, and look upon them. A language though ſometimes uſed, not ſo proper in church-inſcriptions. The ſenſible rhetoric of the dead, to exemplarity of good life, firſt admitted the bones of pious men and martyrs within church-walls; which in ſucceeding ages crept into promiſcuous practice. While Conſtantine was peculiarly favoured to be admitted into the church-porch; and the firſt thus buried in England was in the days of Cuthred.

Browne's Hydriotaphia, p. 27.

|| The laws of a republic, which admit but of little inequality in the conditions of men, would not permit too great a difference in the honours paid to the dead.

preſcribe an harmony between the ſeveral parts; and alſo between theſe parts and the general configuration; from the whole of which reſults an unity of appearance, the moſt certain criterion of its excellence *.

The reaſon aſſigned for the origin of Spires will alſo apply to the pyramids, or round towers, to be found at this day near many of the old churches in Ireland; for it is obſervable, that, at the time theſe towers were built, the Architects of that country were unacquainted with the art of raiſing a Spire over the pillars, at the interſection of the nave and tranſept. They had recourſe, therefore, to an eaſier but leſs ſcientific expedient, by conſtructing, upon ſolid baſes, thoſe round pyramids which always terminated like the Egyptian obeliſks. And notwithſtanding all the learned conjectures that have been made reſpecting the uſe of theſe pyramids, we may reaſonably conclude, that they were intended to denote cemeteries.

We may conceive how far the Chriſtians of the 13th century were impreſſed with the propriety of building pyramids over their cemeteries, from the immenſe elevation they gave to ſome of them. That of Old St. Paul's, for inſtance, was loftier than any of the pyramids of Egypt †. And it is worthy of remark, that they were introduced about the time Science began to revive, and recover its long-loſt energy; hence they may not be improperly conſidered, as ſo many auſpicious monuments of the riſing greatneſs, and returning wiſdom of Europe.

When we conſider the ſtupendous monuments of Egyptian power which ſtill exiſt, we cannot avoid reflecting on the vanity of their founders, and pitying the miſtaken ſyſtem of theology that gave riſe to them. Yet if we examine our own country, we ſhall find more pyramids, even in one province, than exiſt at this day in all Memphis and Sacara. From this circumſtance, one might be induced to ſuppoſe, that the origin of Spires amongſt us, proceeded in ſome degree from Egyptian ideas grafted upon Chriſtian principles.

Amongſt the Egyptians, the pyramid was held to be ſacred ‡; by it they expreſſed the origin of all things. They placed it over their cemeteries, as the Chriſtians do §, to teſtify the lively and exalted ſentiments they entertained of the immortality of the ſoul. Its form, which is like that of a flame of fire ‖, (whence it is ſuppoſed to derive its origin) is typical of the divine ſpirit of the deceaſed, aſcending, after its ſeparation from the body, to the divine manſions of repoſe.

Such, we are given to underſtand, were partly the motives that induced the Egyptians to adopt the pyramid in their ſepultures; that figure, however, poſſeſſes

* Omnis porro pulchritudinis forma unitas eſt.——St. Auguſtin.

† The perpendicular height of the great pyramid is 481 feet, which is 39 feet leſs than the altitude of the Spire of Old St. Paul's, according to Camden's account.——Vide Greaves's Pyramidographia, p. 69, & ſeq.

‡ The Egyptians called their ſepultures eternal manſions; whereas they gave their palaces and houſes the title of caravanſaries, on account of the ſhort time we ſojourn in this life, in compariſon to the time our remains repoſe in the grave.

§ "Le lieu où ſont les pyramides, dit le P. Vanſleb, qui fit le voyage d'Egypte en 1672, eſt un cimetiere, & ſans doute un cimetiere de Memphis; car tous les hiſtoriens Arabes nous apprennent que cette ville étoit batie dans l'endroit où ſont les pyramides, & vis-à-vis le vieux Caire." Encyclopedie.

‖ Sandys's Travels, p. 127. Greaves's Pyramidographia, p. 69.

many intereſting properties, which, independent of theſe motives, might have recommended it to their notice. Experience has evinced, that in point of durability the pyramid is ſuperior to all other figures; it is alſo a form the moſt conſonant with the principles of opticks; as, on account of ſome natural imperfections in the viſual organ, it is continually obtruding itſelf on our ſenſes. For inſtance, a long range of buildings, viewed from either extremity, will appear to incline to a point. A long avenue, a road, or a canal running between two parallel banks, have the ſame effect. To which we may add, that the pyramid has the property of conveying an idea of elevation beyond the actual limits of the object. Whether theſe properties were taken into conſideration by the Egyptian and Gothic Architects or not, it muſt be confeſſed, they have choſen a form that plays very ſtrongly upon the ſenſes, and from it their works derive no inconſiderable part of that effect which fills the mind with ideas of grandeur.

The moderns, as we have already obſerved, ſtill continue to uſe pyramids in their churches and ſepultures; although no other reaſon is aſſigned for this practice, but that it was the cuſtom of our forefathers. We ſhould recollect, however, that Spires were graceful, and well adapted to the general formation of *their* edifices; whereas in *ours* they are quite the reverſe. By attempting to imitate the antique ſtyle of architecture in our churches, we have fallen into a compound one, which is neither Grecian nor Gothic, but rather a piece of patchwork, made up of the remnants of three different nations. Italy has furniſhed the ground plan *, Greece the portico, and France the Spire †. The coalition of theſe heterogeneous parts, cannot with propriety be called Grecian architecture; yet that is the appellation generally given to it. We muſt allow, however, that there are ſome churches amongſt us, executed in this mixt ſtyle, that are not undeſerving of praiſe.

* The Latin croſs is the form uſually given to the plans of our churches.

† The Gothic architecture, with ſpires and pointed arches, is generally ſuppoſed to have originated with the Normans, who, during the eleventh and twelfth centuries, appear to have been great church builders. "The Normans," ſays the learned Abbé Fleury, "had ruined a great number of "churches, and others were ſuffered to decay, by the falſe opinions of the "end of the world, which was expected exactly in the year of our Lord, One "Thouſand. When people ſaw the world ſtill continue after this fatal year, "new churches every where began to be built, in the moſt magnificent ſtyle "the times would allow; and not only ſuperior to the houſes of private perſons, "but even to thoſe of the greateſt lords."——*Mœurs des Chrétiens.*

OF THE GENERAL PROPORTIONS OF

GOTHIC CHURCHES.

FROM the obſervations which at various times I have made on theſe churches, I am led to ſuppoſe that the general configuration, internally, was uſually deſigned agreeable to ſome definite rules, or proportions; notwithſtanding the component quantities were not invariably diſtributed, in every edifice, in the ſame comparative degree of relation, but were modified according to local circumſtances, or the Architect's conception of optical effects. To convey ſome idea of the nature of theſe proportions, I ſhall here ſubmit the reſult of my inquiry, concerning the general interior diſtribution of the Church of Batalha.

The module, or *datum*, taken in this inſtance, is the breadth of the church internally, which we ſhall ſuppoſe equal to AB. (ſee Fig. I. Tranſverſe ſection of the Church of Batalha.) Form a ſquare AEFB, whoſe ſide is equal to AB, and within this ſquare inſcribe a circle; now CD, which is equal to the ſide of a heptagon inſcribed within the given circle, determines the latitudinal diſtance between the axis of the pillars, and conſequently aſcertains the breadth of the nave and ailes. 2dly. From the points C and D, draw CM and DM, parallel to the ſides of the ſquare, and draw the diagonals AF and BE. The magnitude of the pillar being predetermined, according to the laws of ſtaticks, c muſt be its extremity; let o be the axis; form the pillars cdef, and you will aſcertain the diſtance (o,o) between the axis of the ſeveral pillars placed along the nave.

In proportioning the elevated parts, the ſame *datum* is taken as before. The height of the cluſter columns C D, (ſee the Tranſverſe ſection of the Church) is equal to the breadth of the church. The height of the columns of the arcade FE, is two thirds of CD. The radius with which each ſide of the arch over the nave is deſcribed, is two thirds of the ſubtenſe of its baſe; the ſeveral dotted lines ſufficiently explain the reſt.

In order to ſhew that the above proportions coincide with thoſe of the human body, we have given in the ſection the repreſentation of a human figure, whoſe height is ſuppoſed to be equal to the ſuperior part of the cluſter columns CD. According to the ſize of this figure, the hands, if extended, would touch the two ſide walls of the church. The vertex of the arch will be found as far above the head, as the hand can reach when elevated; that is, a cubit, or one fourth of the whole height.

The procedure of the Ancients, in proportioning their edifices, was not diſſimilar to the above, if we are to credit what has been aſſerted by various writers, who have treated on the ſymmetry of buildings. The Ionians, as Vitruvius informs us, modelled the columns of the Temple of Apollo Panionios after the ſame archetype. From the *Ulnar* Arch (repreſented in Fig. 30, Plate I.) it may be inferred, that the Saxons alſo have had recourſe, in ſome degree, to the like expedient. I pretend not to decide on the propriety or impropriety of ſuch analogy: however that may be, it is very remarkable, that Architects ſo locally remote, and in ſuch diſtant ages, as thoſe of the *Ionians*, *Saxons*, and *Normans*, ſhould have proceeded ſo nearly alike, in attempting to aſſimilate the proportions of their buildings to thoſe of the human frame.

Among the various ſtructures of the Ancients, which have been tranſmitted to us, there is none that approaches nearer to the form of a Gothic Church, than the Egyptian Hall, deſcribed by Vitruvius (B. vi. c. vi.); a ſection of which we have given; at Fig. 2, under the Tranſverſe ſection of the Church of Batalha. The ſimilitude of which we ſpeak is obvious at the firſt view; but, were the Hall executed entirely in ſtone, the reſemblance would be ſtill more apparent. The arches over the ailes would require lateral reſiſtance proportionate to their impulſe; buttreſſes would neceſſarily follow, as at HK; the vault of the nave would alſo require an adequate reſiſtance; the nature of the deſign would immediately ſuggeſt the idea of reclined fulcra, extending from the walls of the ailes to thoſe of the nave, as at L M. Now, ſince materials of this ſort could not be eaſily obtained to form each fulcrum of one entire piece, the conjunction of different ſtones, in the form of an arch, is the only ſupport that could with propriety be applied; we ſhould call it a flying buttreſs. It is true, that a ſolid wall of a triangular form would anſwer that end, as is ſeen in the Temple of Peace at Rome; but the ſuperiority of the Gothic manner is evidently preferable in every reſpect. In fine, were an Egyptian Hall entirely conſtructed of the ſimple produce of the quarry, the arches and buttreſſes conſequently introduced, together with the pillars, windows, ailes, and the uncovered paſſages over the ailes, would bear a ſtriking reſemblance to the body of a Gothic Church.

OF DOORS.

THE principal entrances of Gothic Churches are generally ornamented in a very magnificent manner; the Door is uſually placed within a large porch, which porch diminiſhes, as it recedes, in a rectilinear direction; the ſides of it are often adorned with an aſſemblage of ſlender columns, and mouldings of various ſorts. Here are

alſo ſeen ſtatues of Kings, Popes, Saints, and Martyrs, with their reſpective emblems, canopies, pedeſtals, &c. Frequently we find as many entrances in the weſt front, as there are porticos in the Church; but the centre Door, which is generally the largeſt, is ſeldom opened but on days of proceſſion, or for the reception of ſome Dignitary of the Church.

How different the practice of the Gothic Architects, in this reſpect, from that of the Ancients! The latter made the entrances of their Temples large, and approached them by a flight of elevated ſteps. The former, on the contrary, made the Doors of their Churches comparatively ſmall, and on a level with the ſurrounding plain. Sometimes, indeed, we even find ſteps for deſcending into theſe Churches, which ſome imagine to have been appended in conſequence of an accumulation of the adjacent earth; but it is evident that in general theſe ſteps made a part of the original deſign. Some inſtances indeed of elevated entrances to Gothic Churches are to be met with; but they are ſuch, I imagine, as neceſſarily ariſe from the obliquity of their ſituation.

OF WINDOWS.

THERE is no part of Gothic Architecture which admits of more variety, or is ſuſceptible of a greater diſplay of taſte and beauty, than the Windows; the manner in which they are uſually formed is as follows*. The breadth of the aperture is divided into three, five, or ſeven equal parts, with a mullion between each. When the Window is of any conſiderable height, a tranſom or croſs mullion is placed in the middle of it, for the ſecurity of the work. The ſpace between the ſpring of the arch and the ſummit of the aperture is filled with tracery work, compoſed chiefly of tre-foils and quatre-foils, and theſe are ſometimes ſub-divided into other different figures. In all manner of tracery work, whether ſimple or complicated, we find that the interſticial vacuities tend to the figure of a plain or curvilinear triangle, and that their circumſcribing lines are generated by geometrical rules. The moſt beautiful ſort of tracery, in my opinion, is that in which the ſeveral perforations approach to an equal magnitude.

* "The Windows of our Gothic buildings in the reign of Henry the Second were long, narrow, ſharp-pointed, and uſually decorated on the inſide and outſide with ſmall marble ſhafts: the order and diſpoſition of the windows varied in ſome meaſure according to the ſtories of which the building conſiſted; in one of three ſtories, the uppermoſt had commonly three windows within the compaſs of every arch, the centre one being higher than thoſe on each ſide; the middle tire or ſtory had two within the ſame ſpace; and the loweſt only one window, uſually divided by a pillar or mullion, and often ornamented on the top with a trefoil, ſingle roſe, or ſome ſuch ſimple decoration, which probably gave the hint for branching out the whole head into a variety of tracery and foliage, when the windows came afterwards to be enlarged. The uſe of painting and ſtained glaſs, in our churches, is thought to have begun about this time. This kind of ornament, as it diminiſhed the light, induced the neceſſity of making an alteration in the windows, either by increaſing the number, or enlarging their proportions; though a gloomineſs, rather than over-much light, ſeems more proper for ſuch ſacred edifices, and "better calculated for recollecting the "thoughts, and fixing pious affections."

Bentham's Ely, p. 39.

The ſplay of every Window is in proportion to the thickneſs of the wall: a large ſplay appears to have been much eſteemed; and when the wall is not of dimenſions ſufficient to admit of it, then a few mouldings are appended to the ſides of the archivolt, reſting upon a ſtring or belt, or elſe upon a ſort of corbel, formed into a groteſque head. The *apron*, or ſill, has nearly the ſame degree of obliquity as the ſides of the window; at the bottom it projects a few inches, where there is a little channel to prevent the rain from recoiling on the wall.

The piers, between the Windows in Churches, are very narrow, in conſequence of the breadth of the apertures *; and the great ſplay of their architraves, together with the half pillars of the ailes, occupy nearly the whole of the wall; ſo that no plain ſpace remains for the reception of pictures. The Ancients, on the contrary, made the piers of their edifices large, and the apertures comparatively ſmall, which is ſtill conſidered as the *grand ſtyle* in Grecian Architecture; as the magnitude of the piers gave them an opportunity of embelliſhing the inſide with pictures and ſtatues. The Gothic Architects, however, have amply compenſated for this deficiency, by making the Windows, inſtead of the walls, the depoſitory of their pictures; and thus, by commuting the canvaſs for the glaſs, they obtained one important advantage, that is, a natural back light, a light which has the peculiar property of giving every production of the pencil the greateſt poſſible degree of force and brilliancy. The various colours of theſe Windows form a happy contraſt with the ſimple white or gray caſt of the ſtructure; and, as they obſcure the Church in ſome degree, they diffuſe an appearance of ſolemnity, well adapted to the majeſty of the place.

At Batalha, about five o'clock in the evening, when the ſun is oppoſite the great Weſtern Window, the effect of its painted glaſs is moſt enchanting. At this hour the Fathers uſually aſſemble in the choir to chant the Evening Service, whilſt the myriads of variegated rays, which emanate from this beautiful Window, reſemble ſo many beams of glory playing around them.

It is in vain that we attempt to reſtore Gothic Architecture, without the admiſſion of ſtained glaſs; eſpecially in Churches, where a degree of obſcurity is perfectly conſonant with the tombs, inſcriptions, and other relicks of mortality we behold on every ſide. If to theſe we add the ſolemnity of the Divine Service, the awful ſilence, and penſive deportment of the congregation, we muſt admit the propriety of accompanying ſcenes of this nature with a ſolemn ſhade, ſince it is allowed by all to be more productive of ſublime ideas than light. "Our great poet (to ſpeak in the words of a competent judge of theſe matters) was convinced of this; and indeed ſo full was he of this idea, ſo entirely poſſeſſed with the power of a well-

* In the reign of Edward the Firſt, the Windows were greatly enlarged, and divided into ſeveral lights by ſtone mullions, running into various ramifications above, and dividing the head into numerous compartments of different forms, as leaves, open flowers, and other fanciful ſhapes, and more particularly the great Eaſtern and Weſtern Windows (which became faſhionable about this time,) took up nearly the whole breadth of the nave, and were carried up almoſt as high as the vaulting; and, being ſet off with painted and ſtained glaſs of moſt lively colours, with portraits of kings, ſaints, martyrs, and confeſſors, and other hiſtorical repreſentations, made a moſt ſplendid and glorious appearance. Bentham's Ely, p. 40.

managed darkneſs, that in deſcribing the appearance of the Deity, amidſt that profuſion of magnificent images, which the grandeur of his ſubject provokes him to pour out upon every ſide, he is far from forgetting the obſcurity which ſurrounds the moſt incomprehenſible of all beings, but *"

" —— with the majeſty of *darkneſs* round
" Circles his throne."

OF NICHES.

NICHES were uſed but ſparingly by the Gothic Architects. In ſome of the earlieſt ſtructures we trace but few inſtances of them, and theſe few are chiefly confined to the exterior of the edifice. In the Church of Alcobaça, one of the moſt ancient in the Gothic ſtyle, I do not recollect to have ſeen a Niche, or a Statue, that was coeval with the original fabrication; and I may add the ſame of the interior of the Church of Batalha: a ſtrong evidence that ſtatues in thoſe days conſtituted but a ſmall part of the ornaments of Churches. The plan of theſe Niches is generally a ſemi-hexagon; the head terminating with a projecting canopy.

PILLARS.

THE grand effects ſo univerſally admired in Gothic Cathedrals, are, I believe, to be attributed to the artful diſtribution of the Pillars, with their concomitant ſcenery. Their magnitude, and relative ſituations, are proportionate to the dimenſions of the edifice, and can only be aſcertained with preciſion by the laws of ſtaticks and opticks. The cluſter of little ſhafts, and the intervening mouldings, on the ſuperfice of each Pillar, give them an appearance of inſtability, and ſeem ſuperfluous at firſt ſight; but, on tracing their continuity upwards, we find them branching out in various directions, in the ribs of the nave and aile vaults, and converted into archivolts in the ſides of the nave. The manner in which theſe Pillars are placed is rather ſingular, but well calculated for effect and reſiſtance: the ſide of each forms an angle of 45 degrees with the collateral wall, by which their repulſion is greater than if placed parallel, in the ſame ratio the diagonal of a ſquare bears to its ſide.

* Burke on the Sublime and Beautiful.

If the Architects of theſe Cathedrals were ſo illiterate as they are repreſented, it is aſtoniſhing how they could have aſcertained ſo accurately the maximum of their pillars, arches, buttreſſes, &c. whilſt the Moderns, with all their ſuppoſed improvements in this art, and the aſſiſtance they evidently derive from algebra, have not yet produced any examples in conſtruction equal to what the former have left us.

It is not to be ſuppoſed, indeed, that all the Architects of thoſe times were competent to ſuch an arduous taſk; therefore the illiterate ones, whoſe talents were limited to the practice of their art, availed themſelves of the excellencies of ſome approved model, and thus obviated all calculation reſpecting the ratio of force and reſiſtance. This in ſome meaſure accounts for the ſimilarity we find in the breadth of many of theſe edifices, both in this country, and on the continent. We could adduce many inſtances in teſtimony of this fact, if we admit the relation of their Hiſtorians; but, for brevity's ſake, I ſhall only quote the ſtructures meaſured by myſelf, which differ but very little in breadth, as appears by the following comparative eſtimate:

	Feet	Inch.		Feet	Inch.
Batalha	72	4	Ely Cathedral	72	9
Alcobaça	72	0	Weſtminſter Abbey	72	8

In the conſtruction of many of our beſt Gothic edifices, we find but few large ſtones, whence ſome writers have imagined that their Architects were unacquainted with mechaniſm, but I believe it proceeds partly from the nature of the quarry, and partly from their mode of building. The ſplendor of their works conſiſted in arches; in the fabrication of which, materials of a moderate ſize are to be preferred, becauſe large ſtones preſs too heavy on the centres, and require much time and labour in forming their intrados to the curvature of the vault. Where theſe objections did not apply, they often uſed blocks which no human force could raiſe, independent of mechanical aid. Indeed I may venture to aſſert, that there is not in Europe, a Gothic Church, or Cathedral of note, wherein three or four of the mechanical powers have not been uſed. It is obvious that their arches, particularly thoſe of the naves and ailes, are ſupported on the principles of the Statiſtical Balance; each ſtone of which they are compoſed is a fruſtum of a Wedge. Pullies were uſed in raiſing their cornices, pinnacles, &c. and the Lever was neceſſarily employed in moving and fixing them. Here we find the application of the Balance, the Wedge, the Pulley, and the Lever, which four powers would have been ſufficient to raiſe either of the ſeven celebrated ſtructures of antiquity.

How far they were converſant with the theory of theſe powers, is a point not eaſy to decide. The experience of paſt ages has evinced what great things might be effected in mechanicks, independent of ſcientific calculations. The obeliſks, columns, and enormous granite blocks of the Egyptians, were tranſported,

as we are aſſured, without any precognition of the complicated movements of Wheels and Pullies. *Joze Zabaglio*, of Rome, never received any inſtructions, he could not even write or read, yet, by the force of his genius alone, he invented machines which, though ſimple in appearance, produced moſt ſurpriſing effects.

In our own days, we have many ſtriking inſtances of ſimilar inventive faculties in men unaſſiſted by erudition. An obſcure workman, of the name of *Caſhman*, deſigned and executed for the Dublin Society (about eight years ago) a flight of winding ſtairs, aſcending in the midſt of a quadrangular hall, without any apparent ſupport whatever, contrary to all preceding examples.

The Equeſtrian Statue of Joſeph I. King of Portugal, one of the moſt magnificent works of the kind in Europe, was entirely caſt by a perſon of the name of *Bartholemeu da Coſta*, who, as I am credibly informed, is not in the leaſt indebted to the theory of any art or ſcience. This ingenious man, after caſting the above Statue, tranſported it from the foundery to the great ſquare of Liſbon, by machines of his own contrivance, and afterwards raiſed it on its lofty pedeſtal, to the admiration of all the Mathematicians of that country.

FRAGMENTS OF GOTHIC ARCHITECTURE.

PLATE II.

Fig.
1. A Wall of irregular ſtones.
2. A Wall of aſhlar work.
3. Manner of ornamenting the ſuperfice of a wall, as ſeen in the interior of Weſtminſter Abbey.
4. Ornaments ſometimes uſed in tombs, and on the ſuperfice of walls.
5. Ornaments copied from an ancient gothic wall at *Evora*.
6. Manner of decorating a gothic Sacrarium, from the original at *Beja*.
7. A plain embattled top.
8. An embattled top with mouldings.
9. 10. 11. and 12. Various ſorts of embattled tops.
13. A Buttreſs.
14. An arched buttreſs.
15. A Niche.
16. Various ſorts of gothic ornaments.
17. A Teſſellated pavement.

Fig.
18. An impoſt corbel.
19. A Window cill.
20. A Fountain, from the original in the royal cloyſter of Batalha. (ſee the letter A in the general plan.)
21. A Patera.
22. A Pinnacle.
23. A Water-ſpout.
24. A Pillaſter.
25. A Reading-deſk, uſed in choirs.
26. Top of a water pipe.
27. A Trefoil.
28. A Quatrefoil.
29. A Capital.
30. A Pulpit, from the original in the tranſept of Batalha.
31. A Mural Pedeſtal.
32. Machicolations.
33. A Loop-hole.

Fig.
34. An Emblem often ſeen about high altars.
35. An Inſulated pedeſtal.
36. An Aſſemblage of maſons tools of the 13th century, taken from ancient ſculptures, and records.

Fig.
37. Characters which I found engraved on different parts of the Church of Batalha. I believe theſe characters have been aſſigned by the Wardens of the fabrick to the workmen, in order to diſtinguiſh their reſpective performances.

FRAGMENTS OF GOTHIC ARCHITECTURE FROM VARIOUS PARTS OF BATALHA.

PLATE III.

Fig.
1. *Cornice* of the mauſoleum of the founder—Upper part.
2. ——— in the north front of church.
3. ——— in the weſt front of church—Upper part.
4. ——— in royal cloyſter.
5. ——— to the buttreſſes of royal cloyſter.
6. ——— in the mauſoleum of King Emanuel—Externally.
7. ——— of the buttreſſes of centre chapel. (ſee the letter G in the general plan.)
8. A *Cornice* with arched modillions—South front of Church.
9 and 10. *Cornices* of the buttreſſes of chapter-houſe.
11. A *Cornice* in the mauſoleum of King Emanuel.
12 and 13. *Facias* of the circular towers in the mauſoleum of King Emanuel.
14 and 15. Single *Belts*; to the buttreſſes of weſt front of church.
16 and 17. ——— in ſouth front of church—Lower part.
18 and 19. ——— to the buttreſſes of the chapels.
20. ——— in north front of church—Upper part.
21 and 22. Double *Belts* in the ſouth front.
23. 24. and 25. *Belts* to the rere of the chapels.
26. *Copings* to the buttreſſes of royal cloyſter.
27. Vertex *Rib* of the vaults - In collateral chapels.
28. A Diagonal *Rib* of the above chapel.
29 and 30. *Ribs* of the vaults in the mauſoleum of the founder.

Fig.
31. One of the principal *Ribs* in the vault of chapter-houſe.
32. Panels of the buttreſſes of weſt front.
33. Plan of the *Mullions* of the large windows over chapels (ſee the elevation of the chancel of Batalha). N. B. The tranſoms of the windows are moulded in the ſame manner as the mullions.
34. One of the *Mullions* of large window—Weſt front of the Church.
35. The principal *Mullion* of the above window.
36. *Mullion* of the upper windows—North front—Upper part.
37. ——— in the lower windows of north front.
38. *Archivolt* of the circular windows of chapter-houſe.
39. Section of a *water channel* in the roof of the mauſoleum of the founder.
40. *Baſe* and *Plinth* of the columns at the entrance of chapter-houſe.
41. *Baſe* of the windows of chapter-houſe—near the entrance.
42. *Baſe* to the external pillars of the mauſoleum of King Emanuel.
43. *Baſe* and *Plinth* to the internal columns of the above mauſoleum.
44. ——— to the pillars of the mauſoleum of King John I.
45. *Baſe* to the column of the tranſept chapels.
46 —— to the columns of the windows—North front.

RELIGIOUS CUSTOMS OF THE XIIIth CENTURY.

PLATE IV.

Fig.
1. A Crucifix.
2. Emblem of Religion.
3. Chalice and Patine.
4. A Pax.
5. A Mural Crown.
6. A Crown of Thorns.
7. A Chaplet of Roſes.
8. A Celeſtial Crown.
9. Emblem of the Holy Ghoſt.
10. Palm and Olive Branch.
11. A Cherub.
12. A Star.
13. A Star of another form.
14. A Boate.
15. An Ewer.
16. A Dominican Friar.
17. A Nun.
18. A Cenſer.
19. A Phial.
20. A Madona.
21. A Labarum.
22. Symbol of Chriſtianity.
23. Symbol of the Trinity.
24. A Latin Croſs.
25. A Croſs of the Order of Chriſt.
26. A Wavy Croſs.
27. A Greek Croſs.
28. A Raguled Croſs.
29. A Strepitum—Uſed in waking the Friars.
30. An Hour Glaſs.
31. A Memento Mori.
32. A Diſcipline.
33. A Lamp.
34. A Bell.
35. A Miſſal, Roſary, and Cuſhion.
36. A Pſalter.
37. Emblem of Saint Peter.
38. The Baptiſt's Reed.
39. A Candelabrum.
40. A Wax Taper.
41. A Candleſtick.
42. A Seat.
43. A Breviary.

Fig.
44. A Chair.
45. An Horizontal Sun-dial.
46. A Lantern.
47. A Pix.
48. A Flagon.
49. A Folding Chair.
50. A Vertical Sun-dial.
51. A Shield.
52. An Altar and Baldachin.
53. A Mitre.
54. A Tiara.
55. A Cardinal's Hat.
56. A Crozier.
57. A Paſtoral Staff.
58. A Water-pot.
59. A Tomb with a Figure of a Warrior.
60. A Tumulus.
61. A Cryptical Tomb Stone.
62. A Coffin.
63. A Font and Sprinkler.
64. A Confeſſional.
65. Holy Lamb.
66. A Coin.
67. Symbol of the four Evangeliſts.
68. An Oratory.
69. A Mural Tomb.
70. A Canopy.
71. A Flagration.
72. A Sacrarium.
73. A Seal.
74. A Harp.
75. A Shrine.
76. An Organ.
77. A Proceſſion.
78. The five Colours principally made uſe of in the Church Veſtments, viz. white, red, violet, green, and black.
79. An Ancient Gothic Inſcription found at Beja *.
80. A Rota or Wheel, uſed in the Portals of Nunneries.
81. A Friar's Cell.
82. The word Miſſal illuminated.
83. The Modern Norman Gothic Alphabet.

* This Inſcription is read thus: MISERERE MEI DEUS, SECUNDUM MAGNAM MISERICORDIAM TUAM *Pſalms*, LI. v. 1.

DESCRIPTION OF THE CHURCHES OF THE PRIMITIVE CHRISTIANS.*

"THE Church was entirely ſeparated from all profane buildings, at a diſtance from noiſe, and ſurrounded on every ſide with courts, gardens, or buildings dependent on the Church, all ſhut up within an encloſure of walls. Firſt there was a gate or entry which led into a periſtyle, that is to ſay, a ſquare court, environed with covered galleries, ſupported by columns like the cloyſters of Monaſteries. The poor remained under theſe galleries, and were allowed to beg at the Church-door. In the middle of the court was one or more fountains, to waſh the hands and face before prayer: the holy water-vaſes were now introduced. At the farther end, was a double porch leading into the Saloon or Baſilick, which was the body of the Church. I ſay this porch was double, becauſe part of it was without the Church, and the other within, which the Greeks called *Narthex*. Near the Baſilick, on the outſide, were at leaſt two buildings, the Baptiſtery at the entrance, and the Sacriſty or Treaſury, called *Secretarium*, or *Diaconicum*, at the farther end; the latter was ſometimes double. Along the ſides of the Church, were often chambers or cells, for the convenience of ſuch as wiſhed to pray or meditate in private; we ſhould call them Chapels."

"The Baſilick was divided into three parts, proportionable to its breadth, by two files of pillars, which ſupported galleries on each ſide: in the middle was the nave, as we ſtill ſee in all the old Churches. At the eaſtern end was the altar, behind which was the Preſbytery or Sanctuary, afterwards called the Tranſept of the Church. Its plan was ſemicircular, and finiſhed at top like a niche; therefore called in Latin *Concha*, that is, a ſhell; the receſs was called in Greek, the *Abſis*. The Chriſtians, perhaps, at firſt wanted to imitate the ſitting of the Sanhedrim of the Jews, where the Judges were ſeated in a ſemicircle, and the Preſident in the middle. The Biſhop held the ſame place in the Preſbytery, having the Prieſts on each ſide of him. His ſeat was called *Thronos* in Greek, and was more elevated than the others. All the ſeats together were called in Greek *Synthronos*, in Latin *Conſeſſus*. Sometimes this place was called Tribunal; in Greek *Bema*, becauſe it reſembled the tribunals of the Secular Judges in the Baſilicks, the Biſhop being as it were the magiſtrate, and the Prieſts his counſellors. This tribunal was raiſed, and the Biſhop came down from it to approach the altar. The front of the altar was encloſed by an open baluſtrade, beyond which was another ſeparate place in the nave for the Chanters or Singers, which on this account was called the Choir, in Greek *Choros*, or Chancel, from the Latin word *Cancelli*. The Chanters were only ſimple Clerics appointed to that function. At the entrance of the Choir was the *Ambo*, that is, a raiſed tribune, with ſteps up to it on both ſides, ſerving to read the public leſſons: ſince it is called the pulpit, deſk, or lobby. If there were but one *Ambo*, it was in the middle; but ſometimes there were two, that the altar might not be hid. On the right-hand of the Biſhop, and conſequently on the left-hand of the people, was the pulpit for the Goſpel; and on the oppoſite ſide that for the Epiſtle; ſometimes there was a third for the Prophecies."

"The altar was a table of marble or porphyry: ſometimes it was of maſſy ſilver, or even of gold, enriched with precious ſtones, for nothing was thought too coſtly to bear the Holy of Holies. The ceremonies ſtill uſed in the conſecration of altars ſufficiently expreſs this reſpect. It was ſometimes, however, only of wood, ſupported on four feet or columns, rich in proportion, and placed over the tomb of ſome Martyr; for it was cuſtomary to aſſemble, or build Churches by their tombs; or, at leaſt, their bodies were tranſlated to the places where the Churches were erected. Hence, at length it became a rule to conſecrate no altar without placing ſome relics under it. Theſe ſepulchres of the Martyrs, were called their *Memories* or *Confeſſions:* they were under ground, and the way down to them was before the altar. This remained uncovered, except during the time of the ſacrifice, only covered with a carpet, and nothing was placed immediately on it. Afterwards it was ſurrounded with four pillars, ſupporting a kind of tabernacle which covered the whole altar, and was called *Ciborium*, on account of its ſhape, which was that of a cup reverſed."

* Vide Les Mœurs des Chrêtiens, par M. L'Abbé Fleury, § xxxv.

END OF THE INTRODUCTION.

Transverse Section of
the Church
BATALHA.

N3 See the Line XIII XIV in the General Plan

Longitudinal Section of the Roof shewing the manner of mortaring the Stones with which it is covered

Form of the Ridge Stone

The manner of ascertaining the Perpendicular of the Arches

Section of the Arched Buttress at B
D The Water conduit

XIII XIV

Fig 1.

Fig 2

The manner of ascertaining the Simetrie of the Pillars of the Church Batalha

Section of an Egyptian shaft See Vol. II. Ch. 6

THE

HISTORY AND DESCRIPTION

OF THE

ROYAL MONASTERY OF BATALHA,

WRITTEN ORIGINALLY IN THE PORTUGUESE LANGUAGE

BY

FATHER LUIS DE SOUSA:

AND

TRANSLATED INTO ENGLISH, WITH NOTES,

BY

JAMES MURPHY, *Architect.*

THE

ORIGIN OF THE FOUNDATION

OF THE

ROYAL MONASTERY OF BATALHA.

DON JOHN, the firſt of this name, and the tenth King of Portugal, finding his kingdom invaded, encamped in the plains of Aljubarrota, in the diſtrict of Leiria, accompanied by a few, but faithful and reſolute ſubjects. His adverſary, another King named John, and alſo the firſt of that name in the regal line of Caſtile, was drawn up in his front, with all the forces of his kingdom, among whom were a great number of Portugueſe, who followed him either through motives of intereſt, or from a miſtaken idea of the juſtice of his cauſe: Matters having arrived to this criſis, a battle became inevitable.

Notwithſtanding the uncertainty of ſucceſs in war, even when both ſides are equal, and the great danger which threatened the Portugueſe, on account of the inferiority of their number compared to that of the enemy, whoſe multitudes covered mountains and valleys; yet our King, finding that he was purſued within his own dominions, could not avoid meeting his antagoniſt, without great diſcredit, if not total loſs of reputation. At the time he reſolved to give battle, he implored the victory of *Him*, who alone has the diſpoſal of it, whence he is called *the Lord of Hoſts*. He alſo invoked the mediation of the Virgin Mary, becauſe the battle was on the eve of her glorious aſſumption; and made a vow, if he came off victorious, to build a magnificent Monaſtery in honour of her. The Lord was pleaſed to crown his

arms with ſucceſs, notwithſtanding the confidence the enemy placed in the ſuperiority of their numbers *.

In conſequence of his victory, the whole kingdom was ſhortly reduced to obedience; but the time which was occupied in different arrangements did not prevent the King from diſcharging the obligations of his vow. Though employed in arms, he examined deſigns, conſulted architects, and ſought for artificers. On the one hand, he reduced ſome places that held out againſt him; on the other, he proceeded to raiſe this ſacred Edifice; and thus the work of the Monaſtery went on for the ſpace of three years. When engaged in the ſiege of the *Caſtle of Melgaço*, he promiſed to give the Monaſtery to the order of *S. Dominick*, as expreſſed in his will, made many years after in the following words.

"Whereas we promiſed on the day we had the battle with the King of Caſtile, if the Lord would render our arms victorious, that we ſhould order a Monaſtery to be built in honour of our bleſſed lady S. Mary, on the eve of whoſe aſſumption the battle was fought. After the commencement of the ſaid Monaſtery, *Doctor John das Regas*, of our council, and *F. Laurenço Lamprea*, our confeſſor, being with us at the ſiege of *Melgaço*, requeſted, that we ſhould command it to be of the order of S. Dominick: but having ſome doubts on that head, becauſe our promiſe was to build it in honour of our lady, the bleſſed Virgin Mary; they anſwered, that the ſaid lady was much attached to this order, and declared to us for what reaſon. Having duly conſidered the ſame, we conſented, and cauſed to be ordained, that the ſaid Monaſtery be of the Dominican order."

As ſoon as the King made himſelf maſter of *Melgaço*, and was returning home, he ſtopped at the city of Oporto, and thence iſſued his letter of donation to this order, in the beginning of the year 1388.

Father Raymunda de Capua, confeſſor to *Santa Caterina de Sena*, was at this time maſter general of the order: In the ſchiſm which happened in the church, on the death of *Pope Gregory* XI, he took part with the true ſucceſſor of Saint Peter, and vicar of Chriſt, *Urban* VI. This General, finding the province had accepted the convent, confirmed the ſame, and the order took poſſeſſion of it im-

* The following account is given of this battle, by *Emanuel de Faria*, in his Hiſtory of Portugal:

"The king of Portugal, underſtanding the approach of the Caſtilians, drew together his forces from *Coimbra*, *Oporto*, and other places, and marched out of *Guimaraens* to give them battle. On the morning of the 14th of Auguſt, 1385, he entered the plains of *Aljubarrota*, where he knighted ſeveral gentlemen. The Caſtilians at firſt intended to march directly to Liſbon, yet, after ſome conſultation, they reſolved to engage. The forces on both ſides were very unequal: the Caſtilians are reported to have been 33,000 ſtrong, and the Portugueſe but 6,500, beſides having ſome local diſadvantages. The ſun was ſetting when theſe two unequal armies engaged. The Caſtilians, at the firſt charge, broke the Portugueſe vanguard; but the king coming up, his voice and example ſo animated his men, that in leſs than an hour the multitudinous enemy were put to the rout. The king of Caſtile, who headed his troops, being troubled with an ague, was forced to take horſe to ſave himſelf; moſt of the Portugueſe, who ſided with Caſtile, and were in the front of the army, were put to the ſword, for no quarter was given them. The Royal Standard of Caſtile was taken; but, many pretending to the honour, it could not be decided by whom. The number of the ſlain is not exactly known, though very great on the part of the Caſtilians: of their cavalry 3000 are ſuppoſed to have periſhed, and many perſons of diſtinction. This is the famous battle of *Aljubarrota*, ſo called, becauſe it was fought near a village of that name.

mediately. *Father John Martins*, profeſſor of theology, and a perſon of great repute throughout the whole kingdom for virtue and learning, was ordered to preſide over it. The work being conducted under royal agents, he, with his companions, did nothing more than ſay maſs, preach on feſtival days, and reſide as in their own houſe. But they had neither the directing, nor planning of any part, becauſe the whole ſtructure was on the King's account, and carried on by thoſe, who in his name preſided there.

Of the ſituation the King choſe for the Monaſtery, and the reaſons which induced him to build it there.

THE King, deſirous of building a Temple and Monaſtery, which ſhould ſurpaſs the moſt ſtupendous, not only in Spain, but throughout all Chriſtendom, ſucceeded in realizing what he conceived in imagination; for neither *his* age, nor many ſucceeding years, witneſſed ſo grand and magnificent, ſo perfect and elegant an edifice. He invited from diſtant countries, the moſt celebrated architects that could be found, and collected from all parts, the moſt dexterous and ſkilful ſtone-cutters: to ſome he held out honours, to ſome great wages, and to others both. The fame of the greatneſs of the ſtructure, drew from all parts of the kingdom multitudes of workmen, for works of the kind are attended with this good, they maintain numbers of poor people. The King being poſſeſſed of enormous wealth and having faithful overſeers, the work ſeemed to aſcend like an exhalation.

But before we enter upon the particulars of the fabrick, it may not be amiſs to ſay a few words, concerning the motives which induced this prudent King, to conceive in his exalted mind, the idea of raiſing a pile, the admiration of the world, in a depopulated deſert; deſtitute of ſhady woods and cooling ſprings, and in a low, humid ſituation. In great cities and towns, or near them, are to be found many perſons of diſcernment, to praiſe and eſtimate every thing that is meritorious. Wood and water are uſeful and ornamental accompaniments to a great convent: an elevated ſituation adds to its dignity, extends its proſpect, and contributes to the health of its inhabitants. On the contrary, a low ſituation conceals its grandeur, diminiſhes its appearance, and, in conſequence of its generating infirmities, renders it a living ſepulture.

Notwithſtanding theſe weighty objections, the King, agreeably to his previous reſolution, would not change the ſituation in which he received the Divine favour, as declared in the words of his teſtament. Now, ſince it was to be built where the battle commenced (in which ſituation he immediately commanded an oratory to be erected to *St. George*), or in its neighbourhood, there was no place in the diſtrict better adapted for the purpoſe than that which is called *Canoeira*; the ſoil about it being dry, and a fine river flowing throughout the year, very ſerviceable to the Monaſtery. And a little lower down, the eye is ſtruck with extenſive and fertile

plains, watered by its courſe, and by that of another great river. Theſe circumſtances are of great conſideration; for where there is water and ingenious people, there can be no want of refrigerating ſcenes. With reſpect to the lowneſs of the ſituation, it is compenſated by the loftineſs and magnitude of the work, which, the King imagined, would draw thither ſufficient inhabitants to form a reſpectable neighbourhood. As to the humidity of the ſite, the Architects aſſured him, it would dry with the edifice, or at leaſt ſuch parts of it, as were injurious to health; and they were not miſtaken in this reſpect, for, although the Monaſtery experiences moiſture at times, it is not unhealthy. Moreover, the ſituation is not more than half a league from St. George, where the engagement began. All theſe conſiderations outweighed the other objections.

To convey an appropriate idea of this ſtructure, is, more properly, the work of the pencil, than the pen; better adapted for the canvaſs, than the deſcriptive page; becauſe all deſcription muſt fall ſhort of its excellence: it being impoſſible to particularize in writing every minutiæ, which is very eaſy in the language of light and ſhade. The hiſtorian can give but a general idea of things, whereas the painter, by the magick of his art, repreſents every part however ſmall.

As a proof of this, it happened that ſome ſtrangers of good taſte, who had intimation of this ſtructure in their own country, from the copious narrations of our fathers, were greatly ſurpriſed upon ſeeing it, to find how far it exceeded what fame reported; yet, theſe were men who had ſeen and compared the firſt edifices in Europe. With this apology, we ſhall proceed to give as clear and accurate a deſcription of it as we are able.

Deſcription of the Church internally, ---- Dimenſions and Properties of the Edifice.

THE firſt appellation the King gave the Convent, was *Canoeira*, on account of its being within half a league of a ſmall village of that name. The title by which it is known at preſent, derived from the cauſe of its eſtabliſhment, is *Batalha*. Our ancient fathers, more religious than claſſical, call it improperly *De Bello:* a name which would be proper and applicable, were we to take its ſignification from the Latin adjective *bellum* fine, or beautiful, inſtead of the ſubſtantive *bellum*, which imports war.

The Church commenced with amazing grandeur: the workmen, conceiving an idea of its elevation, from the vaſt extent of the foundation, thought it impoſſible to find men and treaſure ſufficient to complete it. The body of the Church alone, from the principal entrance (which is at the Weſt, and runs towards the Eaſt, agreeably to the manner of the Ancient Churches), is 300 palms * long, to the firſt

* A Palmo Craveiro of Portugal is 8 $\frac{25}{100}$ inches Engliſh meaſure. Or, as 43 is to 60, ſo is a Portugueſe palm to an Engliſh foot nearly.

ſtep of the great chapel; and thence to the wall at the back of this chapel 60 palms, making the whole 360. The breadth is 100 palms, equal to one third of the length taken to the firſt ſtep of the great chapel.

The above dimenſions, correſpond with the elevation, agreeably to the juſt proportions of Architecture. The height is ſuch, that an athletick ſlinger can ſcarce caſt a ſtone to the vault of the nave; for it is 146 palms from the pavement of the Church*. Of the two ailes and the nave, the latter is 33 palms wide, and the former $21\frac{1}{2}$ each. Theſe, added together, fall ſhort of 100 palms, the breadth of the Church, as already mentioned; but the deficiency is made up by the addition of the pillars, of which there are eight at each ſide, of twelve palms diameter at the baſe.

The nave and ailes are covered with vaults, which, together with the pillars and walls, are all of hewn ſtone, united with ſuch accuracy, that the joints are ſcarce perceptible. The thickneſs of the walls is equal to that of the baſe of the pillars, that is, 12 palms. The workmanſhip wants only to be poliſhed to exhibit all the elegance that art could deviſe. The quality of the ſtone is the ſame throughout the building, nor could all Spain produce better for ſimilar purpoſes: for, notwithſtanding the colour is very white, yet it is ſolid and durable, and at the ſame time yielding to the chiſſel. This is ſufficiently evident from its having already ſtood 200 years, † without any traces of decay, with the exception of the loſs of its original whiteneſs: it is not ſo tarniſhed, however, as to loſe every trace of its primitive gracefulneſs. In this reſpect, it may be compared to a beautiful face, expoſed to the influence of the ſun and air, yet is ſcarce ever ſo injured as to loſe every trace of its former charms. Thus it is with this ſtone, which derives from antiquity a tint, neither brown, black, nor diſagreeable ‡.

The Tranſept is 30 palms wide, juſt the fifth part of its length, (that is, 150 palms). The walls of the body of the Church are all plain, not interrupted, nor excavated (as is often ſeen in others) by a number of chapels, except, that at the right hand of the principal entrance there is a large arch, leading to a beautiful ſquare room, of which we ſhall ſpeak hereafter.

The front of the Tranſept, at each ſide of the high altar, is ſubdivided into four chapels, that is, two at each ſide §. The firſt, next the Sacriſty, is dedicated to *S. Barbara;* this chapel contains a low Sepulture of a Cardinal, whoſe name and family are no longer known; it is pretty certain, however, that he was of the blood royal. The ſecond is dedicated to our *Lady of the Roſary;*

* See the Tranſverſe Section of the Church.

† The Hiſtorian appears to have written his account of this ſtructure near 200 years ago, for the building is now about 400 years old.

‡ Internally it retains its natural colour, but the outſide of the Edifice has contracted a yellow lamina, which gives it a very picturesque appearance.

§ See the letters H. I. J. K. in the General Plan. See alſo *the Elevation of the Chancel.*

here we ſee a high monument of good workmanſhip, to which *King Afonſo V.* ordered his *Queen Dona Iſabel* to be tranſlated, who died at *Evora*, in the year 1455. The third, which is at the right hand of the high altar, is called the chapel of our Lady *da Piedada* i. e. of Mercy; here the remains of King John the Second are depoſited *. The fourth chapel, the founder of this ſtructure, appointed for the remains of the Grand Maſter of the Order of Chriſt, *Don Lopo Diaz de Souſa:* a ſituation his valour and great ſervices well merited. *Count de Miranda Anrique de Souſa*, now the ſucceſſor and heir of this Maſter, depoſited here, in our days, the remains of his conſort *Dona Mecia.*

In the middle of the great chapel, below the ſteps of the altar, King *Don Duarte* and his Queen *Dona Lianor* are inhumed, in a large tomb of the ſame kind of marble as that of the edifice. This tomb is without any inſcription, and diſtinguiſhed only by the cumbent effigies of both, with their right hands joined: his left reſts upon an eſcutcheon of arms, that of the Queen holds a book. The effigies are of excellent workmanſhip, and ſaid to be executed after nature. Oppoſite the Tranſept entrance, at the end of the croſs, is the chapel of our Saviour, with a large and beautiful ſtone altar-piece of modern workmanſhip †. The other five chapels, that is to ſay, the great and the four collateral ones, may be ſaid to have no altar-pieces: for, allowing that the great chapel and that of the *Roſary* have altar-pieces, they are too ſmall, and of very indifferent workmanſhip; which clearly evince, that they are not of a piece with the reſt of the fabrick, nor correſpondent to the intention of the founder. As to the other three, they are entirely deſtitute of altar-pieces ‡. There are windows in each chapel, in the ſituation wherein the altar-pieces ſhould properly have been placed; whence we may infer, that, were it the intention of the founder to make altar-pieces of wood, or of ſtone, he would have made them at the beginning, or have left a vacancy for inſerting them afterwards. In my opinion, he intended, according to his wonted magnificence, to make them of ſilver, formed like the effigies of Saints, not fixed, but moveable, ſo that upon feſtival days, they might be brought to cover the altars; and, I am the more convinced of this, by his having beſtowed to the treaſury fifteen buſts, as we ſhall ſee hereafter.

In each of the five chapels, the windows are richly illuminated with emblematic paintings on various devout ſubjects. And though the ſituation is bleak in conſequence of the great height of the walls, yet, the greater part of the glaſs is ſtill entire, and the original caſements are not injured in the leaſt. There are perſons reſiding in the houſe, who have fixed ſalaries for keeping them in repair.

* The body of this King, who is ſaid to have died in conſequence of poiſon, was conducted from the Cathedral of Silvas, to this Monaſtery, where it remains to this day incorrupted.

† See the letter F in the General Plan.—The architecture of this altar is in the ſtyle of Boromini, a ſtyle well known for its want of taſte: this, together with its being a modern appendage, induced me to think it not worth repreſenting in the Longitudinal Section of the Church.

‡ Theſe chapels are at preſent ſupplied with decent altar-pieces.

The great chapel is illumined with fourteen windows, of which ten are adjoining the altar-piece, that is, five below, and five above. The height of each is 42 palms, by $3\frac{1}{2}$ in breadth. Conſequently the aperture of every window is 147 ſquare palms, which aperture is filled with ſtained glaſs, without either tranſom or mullion.

The other four are placed two on each ſide, and ſo high, that they receive their light over the collateral chapels; theſe are 20 palms high, and 12 broad. To ſecure the glaſs, each has two mullions of one palm in thickneſs, ſo that we may compute each of theſe windows at 200 palms of glaſs.

The four collateral chapels have each three windows, which differ but very little in ſize; upon an average, we may compute the height of each at 40 palms, by 3 in breadth, with the ſame quantity of glaſs.

Deſcription of the Mauſoleum of the Founder.

WE mentioned before, that on entering at the principal door of the Church, there is an arch at the right-hand, inſide of which is ſeen a quadrangular room, that meaſures 90 palms on every ſide. The ſtones of which it is compoſed, are of the ſame quality with thoſe of the Church; it is vaulted, and the centre crowned with an octangular lanthorn, ſupported by eight pillars; a contrivance which gives light to the inſide, and ſupport to the arches of the ailes, whilſt it adds to the magnificence of the chapel. The diſtance from one column to the other, meaſured on the diameter of the octagon, is 38 palms. The whole is decorated with beautiful windows, which, like thoſe of the Church, are ornamented with ſtained glaſs, bearing the arms of the kingdom, and the emblems of the King as he commanded them to be made. As the lanthorn riſes conſiderably above the firſt tier of windows, there is a faſcia of ſtone at a certain height to bind the work, and upon this faſcia are placed other windows, directly in a line with thoſe below and ſimilar in workmanſhip. The whole height, from the key-ſtone of the vault which covers the lanthorn, to the pavement of the chapel, is 92 palms.

The above lanthorn, forms a kind of pavilion to a ſepulture and an altar, which are placed between the pillars; the ſepulture the King had made for himſelf, and for Queen Philippa * his conſort; though the Church was built

* Queen Philippa, was daughter to the Duke of *Lancaſter*, who, at the inſtigation of King John the Firſt of Portugal, aſſerted his right to the Crown of Caſtile, to which he appeared to have had a legal title by his wife *Conſtance*. Upon this preſumption the Duke ſet ſail from Plymouth, and arrived at *Coruna* in *Gallicia* the 25th July 1386, and landed with 2,000 horſe, and 3,000 archers, beſides other forces; ſeveral perſons of diſtinction accompanying him.

The Duke, at this time, was ſixty years of age, without any grey hairs; his perſon was tall and well ſhaped, he was affable and modeſt in converſation, and in all reſpects anſwered his royal deſcent. With him came his wife Conſtance, and his two daughters, *Philippa* by his firſt wife, and *Catherine* by the ſecond. Scarce was he landed at *Coruna*, when that place acknowledged him as lawful Sovereign, as did alſo the city of *Santiago*, and the greateſt part of the kingdom of *Gallicia*.

When the Duke landed in Spain, King John was at *Lamego*; and having

at his ſole expence, yet, he refuſed with his uſual greatneſs of mind, to occupy the beſt place in it. The monument is of very white marble, and ornamented, on every ſide, with foliage of briars in demi-relief, bearing thorns and berries: at intervals are theſe French words, *Il me plait pour bien**.

The meaning of this emblem is ſo exalted, that we muſt allow this Prince to have great underſtanding; becauſe, if we take the true ſignification of the Latin name of a briar, which is *Rubus*, it means a buſh, or bramble. This is an alluſion to Moſes, who was called by the Lord, amidſt his people to lead them forth from bondage. The King being called in like manner, to a ſimilar enterpriſe, which, like Moſes, he obeyed without heſitation, with the words, *Il me plait*; as much as to ſay, that in compliance with the divine call, he would moſt cheerfully undergo every difficulty and labour for the preſervation of his people.

If we conſider it an alluſion to the myſterious branch of the ſacred text †, which is likewiſe a kind of buſh, or bramble, the device will be very applicable; for, our Prince was confeſſedly another Abimelech, as to what regards his birth and beginning, but by means of works of valour and virtue, contrary to him, he finiſhed his days full of proſperity. Abimelech, in order to reign alone, treacherouſly put to death ſeventy brothers, lawful children of his father, being himſelf illegitimate. Our Prince, on the contrary, was ſo void of ambition, that he acknowledged his two brothers who abſented themſelves, to be nearer and more worthy heirs to the crown than himſelf; therefore, he intended nothing more, than to preſerve it for them under the title of Defender. That of King he did not aſſume, till the united voice of the people, and the abſence of his brothers compelled him to it. If then Abimelech was a fire that came out of the branch, which burnt his city, his people, and himſelf; our King was a fire, or luminary of honours, a victorious hero, and an ornament to the illuſtrious throne of Portugal. After reigning many years, full of proſperity, rich and contented, he departed in peace, ſurrounded by children and grand children, and was beloved by his people, as much as Abimelech was deteſted. So that the device, taken altogether, is ſententious, and highly applicable to the Royal founder.

Upon this tomb are two cumbent figures of marble, one of the King in

agreed to meet the Duke at *Ponte-Maure*, ſet out with a numerous retinue. They met, upon the 1ſt of November, in a plain near *Melgaço*: here it was agreed, that, if the Duke ſucceeded in his enterpriſe, he ſhould give twelve towns with their territories to the King of Portugal, as a dowery with his daughter *Philippa*. The Princeſs, accordingly, was conducted to him, and they were ſolemnly married upon Candlemas-day, in the year 1387. Immediately the Queen's houſehold was eſtabliſhed, and a ſplendid revenue aſſigned her.

The King having ſpent two months with his Queen at *Oporto*, marched at the head of 3,000 Spearmen, 2,000 Croſs-bow men, and 5,000 Infantry, to meet his father in law at *Braganza*. They entered the dominions of Caſtile, and took *Caſtro*, *Calvo*, *Montilla*, *Roſales*, *Valderas*, and *Villalobar*. Though *Gallicia* had received the Duke as lawful King, yet, no place in Caſtile admitted him but by conſtraint. Hereupon the King told him, that, to make an abſolute conqueſt, he had better return to England for more forces. The Duke approved his advice, and they returned to Portugal, where Ambaſſadors came from the King of Caſtile, offering, that Prince Henry, heir to the crown, ſhould marry Catherine the Duke's daughter. The Duke aſſented, and the war betwixt him and Caſtile ended. Soon after he returned to England.

De Faria's Hiſtory of Portugal.

* See No. 28 in the Plate of *Ornaments, Mottos, &c*

† Judges, c. ix.

complete armour, the other of the Queen on his right, with their right hands locked in each other *; their heads are turned towards the weſt, and each has a particular inſcription carved on the ſide of the tomb, which, being large, ſhall have a ſeparate chapter. The altar above mentioned is at the foot of the ſepulchre, adjoining the pillars which ſupport the lanthorn, in ſuch a manner that the altar and ſepulchre together make but one chapel.

In the wall oppoſite to the entrance, at the King's right-hand, are four mural ſepulchres under as many arches of exquiſite workmanſhip; upon the tablet of which ſepulchres are repreſented eſcutcheons of arms, mottos and devices in mezzo relievo, relating to the King's four ſons who are interred therein †.

Don Pedro.

IN the firſt ſepulchre is interred the Infante *Don Pedro*, the eldeſt of the four; he was Duke of *Coimbra* and *Monte mor*, and governor of the kingdom for eleven years during the minority of King *Afonſo* V. his nephew and ſon in law. We might truly affirm that he was the moſt perfect and juſt governor the country experienced for many years. It is related that this Infante viſited ſeven parts of the world ‡: however that was, there is no doubt but he travelled a great deal; in Germany he was preſent with the Emperor Sigiſmund upon ſome memorable occurrences. His death was unworthy of the great virtues with which he was endued: he was unfortunately killed in a battle, called in ancient records *Alferroubeira*, in which he was the ſole object of the enemy's purſuit, and almoſt the only one that fell a victim to his rage, though of all others the moſt deſerving of life.

His ſepulchre exhibits the device of the Order of the Garter, with its motto, of which he was a Knight. This order belongs to the Kings of England, and they confer it as the higheſt mark of diſtinction on their principal friends, and other meritorious perſons. In another part of his ſepulchre are to be ſeen balances, mixed with branches, from which acorns are ſuſpended like thoſe of the ilex, with this motto, *Deſir* §. It is ſaid that the balances are a particular device the Infante had of the great Archangel S. Michael, in a certain miracle attributed to his birth; a device, which coincides with the actions of one who held the adminiſtration of the republic, and with the ſolemn

* See the Plate of the Effigies of King John and Queen Philippa.

† Theſe are the King's four ſons after the Hereditary Prince *Don Duarte*, who ſucceeded him to the throne, and for whom he left the great chapel. We do not reckon the Infante *Don Afonſo*, the firſt child, who died in his infancy, and is interred in the Cathedral of *Braga*.

‡ Don Pedro ſet out from Portugal in 1424 with a train ſuitable to his quality, and travelled over a great part of Europe, Aſia, and Africa, in which employment he ſpent four years. As travels at that time were very rare, eſpecially among perſons of his rank, his gave riſe to many fabulous reports, which have ſince rendered the truth itſelf ſuſpected.

§ No. 29 in Plate of Ornaments, Mottos, &c.

promiſe he made to preſerve juſtice; but as ſerious perſons ſeldom make great promiſes, he aſſures us of his good intentions only, by the word *Deſir*, which means, *I wiſh*.

As conciſeneſs is commendable in all mottos, his muſt be admired; for, though it conſiſts but of two ſyllables, it ſufficiently ſatisfies us with the whole of the device, which is ſuch as might be expected from an excellent governor. His conduct in this reſpect appears to be a true imitation of the great Sages of Greece, who exchanged the arrogant name of Wiſe-men, (for in reality none but God is wiſe), for that of Philoſophers, or Lovers of Wiſdom. The Infante in like manner modeſtly promiſed, not actions, but ſincere intentions, in the public government; and conformably to this promiſe he performed excellent things indeed; like another Solomon, whoſe ardent love of knowledge obtained of Heaven the greateſt earthly wiſdom *.

As it is natural for people to wiſh for the ancient times and golden ages, when they had abundance of every kind of fruit, and lived in perpetual peace without oppreſſion; it appears, the branch with the acorns indicates, that he would endeavour to introduce by his good government a ſimilar age: becauſe, this fruit is ſuch, that, without any care, or labour, the earth produces it, and people had only to gather it, and thus they maintained themſelves in theſe primitive ages, as Hiſtorians inform us.

We may alſo add, that it was a cuſtom among the ancient Romans, to honour, with a crown of oak, the citizen who ſaved the life of another in battle †. This they called the *Corona Civica*; which was ſo much eſteemed, that, after the commencement of the Emperors, they accepted it as the inſignia of clemency, in preference to a crown of gold or of any other kind ‡. It is ſaid, Auguſtus conferred ſuch with his own hands, and permitted himſelf to be crowned with one, conſidering it a gift conferred upon him by the human race, for the general peace he gave to all the world. Now as the Infante was in the kingdom ſuch a great perſonage, he always wiſhed to make it appear that he governed with juſtice and equity between citizen and citizen, by which means, he promoted the good of all: hence we may conclude, conſidering every thing, that the device was judiciouſly adopted.

Don Anrique.

THE ſecond ſepulchre is occupied by the next in age, the Infante *Don Anrique*, Duke of *Vizeu*, Lord of *Covilham*, and Maſter of the Order of

* 1 Kings, c. iii. † Pliny, lib. xvi. c. 1. ‡ Ibid. lib. xvi. c. 4.

Chriſt. It is ſaid, that he was elected King of Cyprus; indeed it appears by the effigy over his ſepulchre, that he was dignified with a royal crown. However that was, we know for certain, that his ſoul was crowned with many and exalted virtues. He led in perpetual continence, a retired and philoſophical life, cultivating all the uſeful ſciences, and, in particular, thoſe of Coſmography and Geography, by which he opened the way, to the firſt diſcoveries, of the ſeas and unknown lands of the coaſt of Africa. For this purpoſe he lived at Sagres, in the kingdom of Algarve, in a ſmall village, which, at preſent, is called after him *Villa da Infante*. In theſe ſublime purſuits, he was bleſſed with a long and tranquil life, and a peaceful death.

His eſcutcheon bears the device of the Garter, with which he was inveſted in his early days, becauſe he was related to the King of England; and another eſcutcheon bears the Croſs of the Order of Chriſt. Among the ſculptures are to be ſeen little ſtalks, with tender branches ſhooting out of them; the form and fruit of which reſemble the evergreen oak, with its acorns; the branches are ſhort and twiſted, and the leaves ſet with ſharp points. He, who purpoſed to cultivate the barren deſerts of Lybia, with infinite danger by ſea and land, which at firſt was the object of his diſcoveries, and the beginning towards humanizing that barbarous country, and giving it the knowledge of the true God, might well expreſs his good intention, and the difficulty attending the enterprize, in the hardineſs of an oak, and by the dry fruit which it yields. His motto is alſo expreſſive of this undertaking, *Talant de bien faire**, that is to ſay, *A diſpoſition to do good.*

Though this expedition put him to great expence and trouble, he never entertained a thought, that it would be attended with more advantage, than the oak and its fruit are to the mountains; as may be inferred from a book which he cauſed to be written on the progreſs of theſe diſcoveries, wherein he conveys the ſame thought under other emblems, very ancient and pointed in their ſignification; namely, the Pyramids, the works of the ancient Kings of Egypt, which, though raiſed with immenſe expence and labour, and reckoned among the wonders of antiquity, yet ſerve for no human purpoſe. However, they clearly expreſs the meaning of the Infante in his writings. The book we allude to was ſent by the Infante to one of the Kings of Naples, and it was ſeen in the city of Valencia, in Arragon, in the Cabinet of the Duke de *Calabria*, (the laſt deſcendent in the male line of that King), who went to Naples, and ended his days with the title and command of Viceroy.

* See No. 30.—Plate of Ornaments, Mottos, &c.

Don John.

NEXT follows the Infante *Don John*, Maſter of the Order of *Santiago*, and Lord High Conſtable of *Portugal*. This Prince married the daughter of the Duke de *Bragança*, grand-daughter of the Lord High Conſtable *Don Nuno Alvres Pereira*. *Don Afonſo*, the brother of the latter, had two daughters, from whom moſt of the Kings and Princes of Europe participate of the blood of this illuſtrious family.

His device conſiſts of extended branches, with wild ſtrawberries, amongſt which are ſuſpended ſquare pouches, like thoſe formerly uſed, with three ſhells over each. The motto is in French, like thoſe of his father and brothers, becauſe, in his time, the French language was much eſteemed and current among Princes for its courteſy and politeneſs: it is this, *Je ai bien reſon* *, *I have good reaſon.*

As we are unacquainted with any particular actions of this Prince, we are at a loſs to know, what his motive is grounded on, for adopting the emblem of the wild ſtrawberries, which no doubt was very proper. The only reaſon we can aſſign for it, is his devotion to the Glorious Baptiſt, as may be collected from his altar, which, together with his name being John, induced him, in all probability, to adopt the emblem of a tree bearing wild fruit. We know the great Saint never looked for any better food; and it is not inconſiſtent to aſſimilate two Saints, the one by devotion, the other by obligation. Now, if the fruit of the foreſt denotes the Baptiſt, the pouches and ſhells are devices of St. James, of whoſe Order the Infante was Maſter.

Don Fernando.

THE laſt ſepulchre † is the place of the laſt and fourth brother, the Holy Infante *Don Fernando*, Maſter of the Order of *Avis*, and the ſixth ſon of King John. His eſcutcheon bears the Royal Cinques upon a Croſs, adorned with the flowers of his Order. The emblems on its field, conſiſt of branches like thoſe on the ſepulchre of the Infante Don John, but with this difference, the latter are expanded, whereas the former are wreathed, and bear a different fruit. Some have ſuppoſed theſe circular branches to be of the thorn tree, in conſequence of the reſemblance they bear to a crown;

* No. 31.—Plate of Ornaments, Mottos, &c.

† Sepulchre. So called by our Hiſtorian, though I conceive it might more properly be named *Cenotaph*, as this Prince was taken priſoner by the Moors in Africa, where he ended his days in ſlavery, and is interred.

but as they have no thorns, we cannot readily admit the ſuppoſition. The emblem, however, in this ſenſe, would be excellent, and altogether prophetic of the thorns and troubles which he afterwards experienced among the Moors.

As he was a Saint, and loved the thorny crown of Chriſt, perhaps he was too modeſt to declare to the world what he foreſaw, that it might not appear he boaſted of virtues before hand, which his actions and patient ſufferings afterwards evinced he poſſeſſed; the thorns therefore are wanting to complete the emblem. Although we ſee no inſcription on his monument, yet its ſilence proclaims more than all thoſe of his brothers.

The ſepulchre of the King and Queen has an altar near it, dedicated to the Holy Croſs: thoſe of the Infantes, in like manner, have altars, which are ſeparated from each other, by arches made in the receſſes of the wall oppoſite the King's feet. Theſe altars are conſecrated to their reſpective tutelar Saints, and decorated with ſmall altar-pieces, ſuitable to the ſituation, and with ancient paintings in good preſervation. The firſt, which is next to the ſepulchre of the holy Infante, is dedicated to the aſſumption of our bleſſed Lady. Among the pictures is ſeen the portrait of this Prince, with his chains and the incidents of his misfortunes.

The ſecond is conſecrated to John the Baptiſt, and is applicable to the name and devotion of the Infante Don John.

In the third, the Infante *Don Anrique*, ordered the Infante Don Ferdinand to be painted; for he conſidered him a Martyr, and as ſuch rendered him devotion.

On the altar of the Infante *Don Pedro*, which is the fourth, is a painting of the Angel Saint Michael, whoſe inſignia he adopted for a device, as we obſerved before.

The wall oppoſite to the King's head is occupied by a large ſacrarium, in which, are preſerved the holy utenſils, uſed in the celebration of the maſſes daily offered up for theſe Princes, and diſtinguiſhed by their reſpective devices and mottos.

That we may not omit any thing concerning the holy Infante, we find here among his wreaths, what was deficient in his ſepulchre, namely, the motto which like the reſt is in French, *Le bien me plait*, that is to ſay, *I am pleaſed with the good.* This he verified by his death and actions. But conſidering his magnanimity, I can hardly believe that he uſed this motto, or permitted it to be applied to him whilſt living; except that the branches in his emblem are of ivy, and

not of briar as has been aſſerted, which appears the more probable from their having no thorns. Then, this motto is proper, becauſe there are two ſorts of ivy; one of which grows clinging round plants to the ſummit, however lofty, without injuring them, and draws its ſuccour from that which it intwines. The other is of a different quality, for it injures the trunk which it intwines. It appears by the motto, that he is only pleaſed with the good ſort, which is conſiſtent with a man, who from the cradle to the grave, was exemplary for his ſteady ſanctity of manners. It is alſo conformable to the purity of his ſoul, conſidering, a peculiarity which is attributed to this plant; namely, if wine and water mixt, be thrown into any veſſel made of its wood, the wine will diſappear and be loſt, and clear water only remain*.

Deſcription of the Church and Monaſtery externally.

THE Church has two entrances, viz. the principal and the tranſverſe. The porch of the principal entrance alone would require a volume to particularize the columns, figures, and variety of ornamental ſculptures, with which it is decorated.

In the centre of the weſt front, juſt above the porch, is a window of ſuch exquiſite workmanſhip, that it is ſcarce poſſible to execute the like, with more accuracy, in wax or needle work, or in the overture of a guitar†. The laſt compariſon is very applicable to its circular form, and to the minuteneſs of its parts: the intervals correſpondent to thoſe, which in the guitar emit the interior ſound, are here filled with ſtained glaſs, repreſenting in various paintings the arms and devices of the kingdom; together with ſymbols and emblems relating to the King. As the perforations are numerous, becauſe of the magnitude of the window, they admit a profuſion of light, though ſomewhat obſcured by the colours; but this obſcurity is amply compenſated by the beauty of the variegated rays.

It is ſurpriſing, how ſuch delicate work has ſtood, ſo many years, uninjured, in that lofty ſituation. The durability and grandeur of the other windows of the Church are no leſs ſurpriſing. In the body of the Church alone are 30 windows, ſo large, that in a clear night the Church is almoſt as luminous as an open ſquare, notwithſtanding the glaſs is covered with colours.

It will not be amiſs to deſcribe the dimenſions of ſome of theſe windows, which, we had taken by an Architect, in confirmation of what we aſſert. In the upper part of the Nave, there are 16 windows, that is to ſay, eight at each ſide, of 18 palms in height to the capitals of their columns, by 9 palms in breadth,

* Plin. b. xvi c. 9.

† See the Weſt Elevation of the Church.

with two mullions, of one palm each, in thickneſs, to ſecure the glaſs; which being deducted out of the breadth, leave 7 palms of aperture; theſe, multiplied by the height, make 126 ſquare palms, the quantity of glaſs in each window.

The two Ailes have 12 windows; that is to ſay, four to the ſouth, joining King John's chapel, and eight at the oppoſite ſide, each twenty-two palms high by ſeven and a half broad. And, becauſe they are likewiſe divided by two mullions of one palm thick, like thoſe of the Nave, each window conſequently contains 121 ſquare palms of clear aperture, and the ſame quantity of glaſs.

Of the ſame height and breadth with theſe, are two windows that accompany the principal door, one at each ſide, which added to the others make the number we mentioned of 30. Such a quantity of glaſs may be reckoned one of the moſt remarkable things in the edifice.

To the above number, are to be added two windows in the Tranſept; that over the tranſverſe entrance alone is 42 palms high, by 14 broad, finiſhed in a moſt curious manner with reticulated ſtone work, and the interſtitial vacuities, filled up with ſtained glaſs*. Theſe, together with the windows of the centre and collateral chapels, added to the fine window over the principal entrance, render the Church luminous, cheerful, and beautiful.

About the time the Church of Batalha commenced, was founded the famous temple of the ſee of Milan, called *Il Domo*, during the pontificate of Urban VI. The interior of this temple is altogether dull, and melancholy; contrary to that of Batalha, which is light and cheerful. The Milaneſe defend their artiſts, and attribute the effect to intention and ſound judgment; alleging, that as a grave, ſolemn aſpect, renders a man more reſpected, ſo, in like manner, a degree of gloomineſs makes a Church more venerable. This reaſoning, however, does not convince me; for, allowing the argument to be true with regard to men, it does not appear that temples, which are the repreſentations of heaven, the ſeat of eternal light, ſhould have any reſemblance to the abode of perpetual darkneſs. To return to our hiſtory: all theſe windows are ſo ſecurely fixed, ſo tranſparent and beautiful in colour, that, notwithſtanding they have already been expoſed to the injuries of 200 years, they ſcarce exhibit any traces of decay.

The ſtone vaults of the Church are alſo covered with a roof of the ſame materials, compoſed of large ſquare flags, about the thickneſs of the leaf of a ſtrong table, and *rebated* at the edges†: thus, an everlaſting

* See the Elevation of the *Tranſept Entrance*.

† In the *Tranſverſe Section* of the Church, the covering of the roof he alludes to is repreſented.

roof is formed, that will bear to be walked over, ſwept, and cleanſed of every dirt, contracted by the accumulation of years.

The top is encloſed on every ſide with a railing of ſtone work, over which are placed *fleurs de lis*, that ſerve as a diſtinct crowning. In order to ſee every part of this vaſt machine, there are two circular ſtair-caſes, formed like ſcrews, which lead to the roof of the building; one is in the tranſept wall, at the left-hand ſide on entering at the ſouth door; the other adjoining the chapel of our Saviour; each conſiſting of 120 ſteps *, from the church floor to the ſummit of the edifice.

There is alſo another ſtair-caſe in the convent of very eaſy aſcent, from the ſummit of which, we have a remarkably delightful and extenſive proſpect of a mountain of ſtone. Nor does it differ very much from other mountains, except, that here, the rocks are worked and poliſhed by dint of art; whereas the others are ſhapeleſs, in a rude ſtate of nature, with various inequalities, now ſinking into deep valleys, then proudly aſpiring to the clouds. In the ſame manner we ſee ſome inequalities in this ſtructure: in one part a mountain appears, as in the body of the church, whilſt other parts are in a valley, as the refectory, chapter-houſe, and cellar; lofty pyramids are alſo found here, emulating in height thoſe of nature, but much ſuperior in beauty.

Theſe pyramids, which are three in number, are of very rare workmanſhip, and conſtructed in ſuch a manner as to admit of acceſs to the ſummit †, but not without danger, becauſe of their great elevation: the one over the lanthorn of the Founder's Chapel is in the form of an octangular pyramid ‡, 50 palms in height, with a ſpace of 4 palms on each ſide of the baſe, ſurrounded with a parapet of net work, and crowned with *fleurs de lis*. Taken altogether, it has a majeſtic and beautiful appearance. Another takes its riſe over the Archives, between the cloyſter and the ſacriſty, and is in height 63 palms §. The ſpire over the tower ‖, which contains the bells and clock, is not leſs deſerving of notice; it is ſimilar to thoſe we have juſt mentioned, and ſuitable to the reſt of the fabrick.

* Each ſtep is 9½ inches high, the whole height is conſequently 95 feet.

† There is no other acceſs to its ſummit than by means of the bunches placed on the angles of the pyramid or ſpire (figures 15 and 16 in the Plate of Ornaments, Mottos, &c.), to which I ſuppoſe he alludes. Sir Chriſtopher Wren was of the ſame opinion. "The angles of pyramids in the Gothic architecture "were uſually enriched with the flower the Botaniſts call *Caleolus*, which is a "proper form to help workmen to aſcend on the outſide to amend any defects, "without raiſing large ſcaffolds upon every ſlight occaſion. I have done the "ſame, being of ſo great uſe, as well as agreeable ornament."

Parentalia, p. 302.

‡ The pyramid he alludes to was deſtroyed by the earthquake of 1745, as obſerved in the Preface. I have given a repreſentation of it in the *South Elevation of the Mauſoleum of King John the Firſt*, from an ancient painting on one of the windows of the church.

§ This ſpire is 62 feet 2 inches high, as repreſented in the plate; which height I aſcertained two ways, firſt, by a quadrant; ſecondly, by taking the diameter of the baſe of the pyramid, and the angle of inclination of one of its ſides.

‖ That ſpire does not exiſt at preſent.

Of the Sacriſty, with the treaſure of relicks, gold, ſilver, and veſtments, which the Founder beſtowed.

THE entrance into the ſacriſty is from S. Barbara's chapel, at the end of the croſs. It has nothing in its architecture remarkable for grandeur or compoſition, but is well worth ſeeing on account of the treaſure of ſacred relicks, gold, ſilver, and veſtments of brocade, tiſſue, and ſilk of every kind, that the King, with a true princely liberality, conferred on it: we ſhall commence with the moſt precious, which are the relicks.

The Emperor of Conſtantinople, *Emanuel Paleologus*, being in the city of Paris in France, in the year of our Lord 1401, whither he came, for the purpoſe of obtaining the joint aſſiſtance and protection of the Chriſtian Princes of the Weſt, againſt the power of the Ottoman Empire, which was overrunning Aſia, and threatening Conſtantinople and Europe: the King ſent an Ambaſſador to viſit him, which viſit the Emperor returned with a preſent of precious relicks, very eſtimable for their quality, and for the certitude and credibility they derived from the authority of ſo great a Prince. Theſe relicks were accompanied by a Certificate ſigned with the Emperor's own hand, and a ſeal of gold pendent. We ſhall here give a tranſlation of this Certificate, as it well deſerves our notice.

" *Emanuel Paleologus*, Faithful in Chriſt, Emperor of the Romans, and ever " Auguſt. Health to all to whom theſe imperial letters ſhall come, through him, " who is the ſalvation of all. Our merciful Saviour and Redeemer Jeſus " Chriſt, who offered himſelf to God the Father, as a ſacrifice without ſtain, " at the altar of the holy croſs, left to all faithful Chriſtians the marks of " his ſufferings as a remembrance of his miracles."

" Whereas we had in our city of Conſtantinople, ſome holy relicks of " our Saviour, and of many Saints worthy of veneration, as handed down " to us from the moſt Serene Emperors our Fathers, in authentic hiſtories " and faithful chronicles; the ſaid relicks being preſerved by them, as they " are likewiſe by us, with all due care and veneration. And, whereas we " happened to ſojourn to theſe Weſtern parts, on account of the perſe- " cutions and oppreſſions of the Turks, the cruel enemies of the moſt ſacred " name of Jeſus Chriſt, which they, with their forces, endeavour to extermi- " nate from the face of the earth, eſpecially in parts of Thrace: therefore, in " order to ſeek aid and protection for the Chriſtians of the Eaſtern pro- " vinces, who are oppreſſed by the ſaid infidels, we brought with us part " of the aforeſaid relicks and ſhrines; and being perſuaded, that the moſt

" illuſtrious Prince, our couſin, Don John by the grace of God, King of Por-
" tugal, is worthy of all honour, and filled with zeal for the faith and
" Chriſtian religion, inſomuch, that his devotion for the Lord daily increaſes,
" we thought proper to give him part of the ſaid ſacred things, and ac-
" cordingly, we now give to the ſame moſt Serene Prince a ſmall croſs of
" gold, within which are ſome precious relicks of the Apoſtles, *St. Peter*,
" *St. Paul*, *St. George*, and *St. Bras*. In the middle of the ſaid croſs,
" is a particle of the ſponge, with which the gall and vinegar were given
" to our Saviour. In teſtimony of the truth of what is herein delivered,
" we have cauſed this paper to be written to the ſaid moſt Serene Prince,
" ſigned with our hand in Greek, and in red ink, according to the cuſtom
" of our Empire, and authenticated by our ſeal pendent of gold, bearing Greek
" letters. Dated in the City of Paris, the fifteenth day of June, 1401.
" We alſo give to the above King, a ſmall remnant of the garment of our
" Redeemer Jeſus Chriſt: it is of a colour reſembling the yew, of which tree it
" is made. Any woman afflicted with the hemorrhage, is immediately cured
" by touching its hem. This ſacred relick is incloſed in a ſhrine of cryſtal ſet
" in gold."

" *Emanuel Paleologus.*"

THESE holy relicks, accompanied with the certificate of the Emperor, the King received, and commanded to be depoſited in the Convent and Sacriſty. The ſeal is round: on one ſide, is a large Latin I, placed in the centre, with a medal, bearing the portrait of the Emperor, and an inſcription, *Emanuel, in Chriſt, Emperor Paleologus*. On the reverſe is an image of Chriſt, with another Latin I, and the words, *Jeſus Chriſt*. The Latin I, ſhews the title, in which, he eſteemed himſelf the Emperor of the Romans.

Such are the Relicks; we ſhall next point out the plate and other articles preſented by the King, viz. Fifteen ſtatues of caſt ſilver, very coſtly and beautiful, repreſenting the like number of Saints of his devotion. Twenty-eight chalices, moſt of which are gilt. Fourteen pair of cruets. Five fonts with their ſprinklers. Eight cenſers and ſix boats. Nine ſmall croſſes to accompany them. Nine portable croſſes for the ſervice of the altars. Four great croſſes, three of which are for proceſſions, and one to ſtand on the high altar. Two lofty candleſticks gilt, and twelve inferior ones. Six torch ſtands, of which two are gilt: it is recorded theſe two weighed ninety-one marks. Seven lamps of immenſe ſize and weight. One lantern. Five pixes. Five paxes. Two ewers, with their water plates for waſhing the hands. And two ſmall bells.

This plate, as may be well conceived, weighs more than 1200 marks, and is very valuable for its workmanſhip, and on account of a great part of it

being gilt. Reduced to our ſtandard, it weighs upwards of 600lbs. a magnificent and royal donation for the ſervice of the houſe of God, and that, at a time, when we poſſeſſed neither Eaſt nor Weſt Indies.

The furniture that he commanded to be made, for the ſervice and celebration of the maſs, and for decorating the altars, conſiſts of eleven very rich brocades, with their copes, altar and pulpit cloths, the greateſt part of which are ornamented with fancy lace work, or embroidered with gold in a very rich manner. Thirty-two veſtments of coſtly ſilk, together with many particular veſtments of brocades, tiſſues, and ſilks, for the ordinary ſervice of each day. Beſides ſeveral large cloths of gold, of brocade, and of velvet, and different curtains of ſilk, to ornament the church, altars, and to cover the ſepulchres, at the celebration of the anniverſaries.

A great deal of the plate being ſuperfluous, there was ſold as much of it, as weighed 811 marks. Of the veſtments, there were ſold, altogether, four of the richeſt, and another was melted down, which was covered all over with ſilver foil, in ſuch a manner, that none of the ſilk under it was perceptible, ſo that its weight rendered it fitter for ornament than uſe. The committee appointed for diſpoſing of the above, were compoſed, not of the Fathers, but of people called in, who judged it neceſſary to raiſe a ſum of money to ſupport and carry on the work of the Convent, which was at a ſtand. Having obtained licence from the Penitentiary's Court at Rome, addreſſed to the Biſhops of *Lamego*, *S. Thome* and *Targo*, in the fourth year of the Pontificate of *Pope Paul* III. they commanded the overſeers and melters to purchaſe amalgamating implements; very neceſſary things for a Convent that poſſeſſes but little revenue.

Deſcription of the Chapter Houſe *.

FROM the Sacriſty you enter the Chapter Houſe. This room is ſo conſtructed, that there can be nothing more wonderful, in ſo much, that it comprehends the utmoſt degree of architectural ſkill. Its form is a ſquare, each ſide of which meaſures 85 palms, and is covered with a vault of hewn ſtone without column, prop, or any thing to ſupport it, but external buttreſſes, ſuch as are in the ſide of the church.

It is recorded, that in conſtructing this vault, it fell twice in ſtriking the centres, with great injury to the workmen. But the King, deſirous, at all events, to have a room without the defect of a central ſupport, promiſed to reward the Architect, if he could accompliſh it. At this, he was animated in ſuch a

* Annexed is the Section of this magnificent room.

manner, that he began it again, as if confident of ſucceſs. The King, however, would not hazard any more the lives of his workmen in ſtriking the centres: therefore he ordered, from the different priſons of the kingdom, ſuch men, as were ſentenced to capital puniſhments, in order that, if the like diſaſter happened a third time, none ſhould ſuffer, but thoſe, who had already forfeited their lives to the offended laws of their country.

In the middle of this room, is a large quadrangular eſtrade of wood, with ſteps on every ſide: over this eſtrade, are two tombs, covered with rich cloths: in one are the remains of King Alfonſo V. grandſon of the founder; in the other is depoſited Prince Alfonſo, ſon of King John the Second, who unfortunately loſt his life at *Santerem*, by a fall from his horſe as he was riding along the banks of the Tagus.

Royal Cloyſter.

FROM the Chapter Houſe we paſs to the Royal Cloyſter: the door of the one is oppoſite to that of the other; its form is a ſquare; each ſide meaſuring 250 palms, 30 of which are covered at each ſide with ſtone vaults. The vaults of this Cloyſter exhibit a number of magnificent Gothic arches, filled up, from the ſpring to the ſummit, with beautiful tracery work: it is evident from their excellence, that the Artiſts who executed them, were not inferior to thoſe who formed the frontiſpiece of the edifice, nor the deſigners of the former, leſs ingenious, than thoſe of the latter.

The inſcribed quadrangle of the Cloyſter is diſtributed into walks, bordered with large hewn ſtones, and the incloſed ſpaces are planted with a diverſity of ſhrubs and flowers. In the midſt is a large ciſtern of water; and in one of the angles, a lofty fountain, with water jetting out of different baſons, into a large circular reſervoir. The fountain is very uſeful in this ſituation, becauſe, the refectory door is contiguous to it, ſo that thoſe who enter, may waſh their hands, and gratify their ſight, whilſt waiting the ſignal of the dinner bell: for this purpoſe, the wall next the refectory door is furniſhed with ſeats and wainſcoted backs, for the accommodation of the Fathers.

Refectory.

THE Refectory door is ſituate in the N. W. angle of the Royal Cloyſter, the weſt ſide of which, it nearly occupies. This room, from its magnitude and excellent workmanſhip, may be conſidered of a piece with the

reſt of the fabrick, being in length 133 palms and 44 in breadth *, which is nearly equal to one third of its length: it is lofty and well lighted: the whole is covered with a ſtone vault ſimilar to thoſe we have already deſcribed.

The other inferior offices of the convent in general, ſuch as the ſtore rooms and cellars, are of dimenſions ſuitable to their uſe, and ſufficiently large to contain the various fruits for the ſuſtenance of the ſociety, who are numerous on account of its being a place of continual ſtudy. The wine cellar alone is 160 palms long by 43 wide, covered with a vault.

North of the wine cellar there is a cloyſter of about half the area of the Royal cloyſter, of very good workmanſhip. On viewing the outſide of the convent it appears like a fine village, or many convents together, becauſe of the dormitories, *hoſpitia*, infirmaries, library, and the novices' preceptory. The laſt is extenſive enough for a good convent, from the dimenſions of its corridors, the number of its cells, the diſtribution of its oratory, together with its orchard and garden.

Through the dormitory of the convent runs an extenſive corridor, covered with a common roof, and lined with boards, the better to preſerve the Fathers' health. At the north end is an open terrace, which commands a pleaſant proſpect of orchards, and a large vineyard, refreſhed by the conſtant courſe of a fine river. Here alſo are ſeen ſeveral deep ponds, that at times afford amuſement to the recluſe and ſtudious Fathers by fiſhing with cane rods and nets. In this corridor are the infirmary and hoſpitium, with more than 60 cells, excluſively of thoſe of the novices which amount to 24. The lay-brothers' apartments both externally and internally, the various entrances, the paſſages to the different offices, the ſeveral involutions, notwithſtanding their number, all have the appearance of a Royal edifice. Order and convenience, cleanlineſs and good attendance, are obſerved in every part; and, to complete the whole, a large ſubterraneous ſtream of water runs acroſs the edifice, which carries off all the impurities of the convent.

* 32 palms is the breadth mentioned in the original, which is a miſtake.

Deſcription of the Mauſoleum of King Emanuel.

WITH the foregoing humble and unadorned deſcription, we have endeavoured to exhibit the magnificence of the edifice which is completed; but there is another leſs ancient not yet finiſhed, which, if perfected, would crown the ſplendor of this monaſtery.

At the back of the chapel of S. Barbara *, there is a door, with a croſs over it in demi-relief, like thoſe worn by the Knights of the order of Chriſt: this croſs ſtands between two armillary ſpheres, which guard a ſhield bearing three characters, viz. the letters E*y* within a large C†.

One would ſuppoſe that the author of the work intended to excite the attention of the curious who came thither, and was reſolved that his enigmas ſhould coſt them more trouble to decypher, than an Egyptian hieroglyphick, or a Sibylline oracle. Indeed, it would be much eaſier to form a judgment of ſubjects of the latter kind, becauſe, with the aſſiſtance of words and alluſive figures we may draw ſome ſatisfactory concluſion. But from a few inſulated letters it is difficult to aſcertain the preciſe meaning of the author; and the more ſo, as they are ſubject to receive, camelion like, the colours we wiſh to impart to them, or, like virgin wax, ſuſceptible of every voluntary impreſſion.

This door of emblems and myſterious cyphers leads to a loggia directly behind the high altar of the church ‡, in the middle of which is a beautiful door-way §, compoſed of ſmall ornamented columns, which are formed into arches over-head: they have no capitals, nor any other ſeparation whatever. The entrance, which is very wide, has ſeven columns on each ſide, and commences, from the extreme ones at the outſide, to contract as it recedes till it attains the magnitude of a moderate aperture.

The dimenſions and ornaments of the ſeven columns are various, but all ſculptured with ſuch exquiſite delicacy, ſo beautiful in form, and perfect in execution, that one would ſuppoſe it impoſſible to form the like of the moſt pliant wood ‖. The work, therefore, muſt have been attended with great expence, conſidering the time and labour it took to carve and poliſh every ſtone,

* See the letter Q in the *General Plan.*
† Vide Fig. 2 in the annexed Plate.
‡ P in the *General Plan.*
§ See the Entrance to the Mauſoleum of Emanuel the Great.

‖ In the annexed Plate we have given a repreſentation of theſe columns, with the other ornaments and hierogiyphicks appertaining to this Mauſoleum.

and the number that muſt have been broken under the chiſel, on account of the extreme delicacy of the parts.

In four of the interſpaces of the above columns, there are words at certain intervals, the characters of which are ſimilar in form to thoſe we mentioned before: they are as follow, *Tanyas erey* *. I have been the more particular in noticing theſe characters, becauſe in paſſing from this monaſtery formerly, in our journey to *Entre Douro e Minho*, we met at *Vianna* an edition of a book entitled, The Life of the Holy Archbiſhop of *Braga*, *D. F. Bartolomeu dos Martyres*. The Fathers of that place read ſome words in it thus. *Tangas e Rey*, making a *g* of the *y*, in *Tanyas*, and dividing *erey* into two words, which evidently is contrary to the form of the ſculpture, as I then ſhewed them. The frequent repetition of theſe words made me ſolicitous about inquiring after their meaning among the old Fathers, hoping, that by tradition from their predeceſſors, they might have obtained a knowledge of the ſenſe that was annexed to them at the time they were ſculptured. And this did not appear at all improbable, becauſe they are not more ancient than the days of King Emanuel. Of the language it is not eaſy to form any opinion, as it is neither Latin nor any of the modern European tongues. But we could find no perſon to ſatisfy us with any well founded argument reſpecting thoſe, or the other cyphers at the entrance of the Loggia.

As it is the duty of an author to deliver his opinion on doubtful paſſages of hiſtory, it will not be deemed preſumptuous in me, to endeavour to untie, or cut with a ſhort diſcourſe, this which is not a Gordian knot, though it belongs only to Alexanders to touch thoſe knots which are tied by Kings.

As I found in theſe words no affinity to the language of the country, I had recourſe to foreign languages; and upon ſhewing the words to a perſon of great erudition, we concluded that they were Greek; *Tanyas* being the accuſative of the Greek word *Tanya*, which ſignifies *Region*, and *Erey* the imperative of the word *Eréo*, which ſignifies either *Seek thou*, or *Inquire*, or *Diſcover*,----ſpeaking as it were in the name of the Lord, from the Temple which King Emanuel built, ſaying, *Go thou and explore new regions and new climates*; thus animating him, not to deſiſt from his glorious deſigns. And this ſignification is conformable to the enterpriſe this Prince had actually in contemplation at the time, namely, the diſcovery of India †. It alſo agrees with

* Vide Fig. 9. of the Plate of columns, ornaments, and hieroglyphicks.

† During the reign of John the Second, the Cape of Good Hope was diſcovered by *Bartholomeu Diaz*. Soon as Emanuel his ſucceſſor aſcended the throne, he aſſembled his council to deliberate on the expediency of proſecuting the diſcovery of India, which, after much conteſt, was reſolved in the affirmative. Vaſco de Gama was appointed to take command of the fleet ſent upon that expedition. He ſailed from Liſbon the 8th of July, 1497, with three ſmall ſhips and 160 men, and arrived in India the year following.

the device of his myſterious ſpheres, which were adopted by him for another end, and were prophetic of his conqueſts over a great part of the globe.

But the cypher of the firſt mentioned door gives us more trouble, as it conſiſts of letters which form no definite word. The firſt difficulty that occurs, is to aſcertain the language to which thoſe characters belong. I take them to be Greek, like thoſe we mentioned before; and, being ſurrounded by ſpheres and the croſs of the order of Chriſt, I am induced to conclude there is unqueſtionably ſome myſtery inveloped in them.

It appears, indeed, as if the founder of the work intended that we ſhould have here, an emblem in imitation of the celebrated ancient temple of Delphos in Greece. For, we read, that over the door of that temple, there was a cypher almoſt ſimilar, and at the portal an inſcription addreſſed to thoſe who entered. The inſcription was this, γνωθι σεαυτον: that is to ſay, *Know thyſelf.* The cypher was EI, which ſignifies, *Thou art.* This cypher ſo puzzled the ancient Sages, that Plutarch compoſed a book upon it*, wherein, after many arguments, he concludes, that by the word EI is meant *One Eternal God.* His words are as follow:

Deus enim eſt, et eſt nulla ratione temporis, ſed æternitatis immobilis, tempore et inclinatione carentis, in qua nihil prius eſt, nihil poſterius, nihil futurum, nihil præteritum, nihil antiquius, nihil recentius: ſed unus cum ſit, unicus nunc ſempiternam implet durationem.

And lower down,

Non enim multa ſunt Numina, ſed unum.

Which nearly ſignifies, " that it is only of God one can and ought to ſay that He is; and this Being is without any dependence or meaſure of time, a permanent and immutable eternity, an eternity without time or change, inſomuch that there is nothing in it firſt or laſt, nothing paſt or future, nothing more ancient or more modern: as He is but one, with one only His preſence now fulfills, accompliſhes, and declares His perpetual eternity without end."----" Becauſe in truth there is but one God."----Thus far Plutarch.

The learned Father *Franciſco de Mendoça*, of the Society of Jeſus, favours this meaning in his firſt volume upon the Book of Kings; and alſo Euſebius in his Evangelical Preparations†. It is a doctrine ſo conformable to what we find in holy writ, that one would think the Gentile Hiſtorian took it from that part where we read *Ego ſum qui ſum,* QUI EST *miſit me ad vos:*

* Plutarch. lib. de EI, apud Delph.

† Euſeb. lib. ii. c. 7.

I AM THAT I AM. I AM hath ſent me unto you*. This author finally concludes that the cypher EI is an admonition to us that we are obliged to fear, love, reſpect and adore a God who exiſts through all eternity. The words which cloſe the treatiſe ſay as much:

Hoc enim pronunciatum eſt, ut nos percellat & ad venerationem Numinis, utpote quod ſit ſemper, excitet.

Hence I have no doubt but the ſame thing is repreſented to us in the emblem of which we ſpeak, and that it is the anſwer of the King to the Lord, who commands him to undertake the diſcovery of new ſeas and lands, ſaying, as it were, *I know, O Lord! that nothing but thee is worthy to be ſought for. Theſe ſeas and lands, even though joined by many worlds, have their limits and duration, but thou alone art eternal, immortal, infinite.*

Nor does the letter C oppoſe this meaning, for it ſerves only to ſupport the other two, or to point out to us, in the eternal eſſence, the ſacred myſtery of the Trinity of the Divine perſons, unknown to the Pagan hiſtorian. This we ſhall attempt to ſhew in two ways; firſt, becauſe it is the third letter of our alphabet, the ſame mode of reaſoning by which Plutarch proves that the cypher EI was the number five. In the ſecond place, becauſe with the other two letters, it makes the number three, as it ſurrounds the E to which the *y* is joined.

The third letter is ſelected from the Latin alphabet in preference to the Greek, and joined with the other two Greek letters. Though at firſt this may appear an impropriety, we may reſt aſſured it was dictated by judgement: it is a teſtimony of the catholic truth, expreſsly adopted by one who was a ſon of the Latin church.

To conclude, I have only to obſerve to thoſe who have a knowledge of the Greek, not to be ſurpriſed if they find the Greek *y*, where the Latin *i*, or the Greek *iota* ſhould be: we ought to pardon ſuch inadvertence in the illiterate workmen who carved them, ſince in our language and mode of writing both letters have the ſame power and ſignification.

Having paſſed through the door of the Loggia, we behold a large unfiniſhed edifice which forms a perfect octagon†. In this edifice are ſeven chapels ſimilar in deſign and execution; their arches, tracery work, and various ornaments are finiſhed in the moſt exquiſite manner. Indeed it is much to be lamented that ſuch a ſtructure ſhould remain incomplete, conſidering the ex-

* Exodus, c. iii. v. 14.

† See the letter R, in the *General Plan.*

pence of finiſhing it would not be very great in compariſon to what has been already done, as the walls of the entire are raiſed to that height, whence, according to the rules of art, the large vault ſhould ſpring to cover the fabrick, and make that which is now an open area an incloſed chapel. Notwithſtanding this fabrick has been ſo many years expoſed to the weather, it ſcarcely diſcovers any marks of decay: an evident proof of the goodneſs of the workmanſhip and durability of the materials.

The purpoſe for which this pile was raiſed in ſo magnificent a ſtyle is very evident. The remains of all the Princes after King John the Firſt and his Sons, are diſpoſed about the convent, in a manner that ſcarcely deſerves the name of interment. It was but reaſonable, therefore, that ſome pious heir in the tranquil enjoyment of peace, ſhould collect their remains, and give them a friendly and ſuitable abode.

Now there are various opinions reſpecting who it was that conceived the idea of the edifice and put the firſt hand to it. But it is not to be doubted that the greateſt part of it was done by King Emanuel, or at leaſt with his permiſſion, and during his reign, for we have poſitive proofs to verify it. In the firſt place, we ſee in the chapel oppoſite to the entrance* (the moſt conſpicuous of the ſeven) two ſpheres ſimilar to the above mentioned over the firſt door, the well known conſtant devices of King Emanuel. In the ſecond place, we read upon ſhields, in the pendent orbs of the vault of his chapel, the words *Tanyas erey*. Hence we may conclude, that this inſcription, ſo often repeated in the beautiful portal, together with the emblem of three letters over the firſt door, evidently belonged to the ſame King, for both are accompanied by the ſpheres. The croſs of the Order of Chriſt ſeen over the firſt entrance is not averſe from this argument, for he was Maſter of that Order before he was King, and afterwards united it for ever to the crown. But all our doubts reſpecting this matter are removed by a Latin Inſcription which is over a door in the Loggia contiguous to the entrance: it is this, *Perfectum eſt opus anno* 1509, meaning that it was brought to that ſtate of perfection in ſuch a year, being the epoch in which he attained a good age and a glorious reign, enjoying the victories and treaſures of India †.

There are ſome however who think the founder of this work was Queen *Laynor*, ſiſter to King Emanuel, intending it as a depoſitory for the remains of her huſband, King John the Second, and her ſon, Prince *Alfonſo*, neither of whom have proper ſepulchres in the convent: having poſſeſſed a large revenue, and was a Princeſs of great piety. King Emanuel, her brother, was much at-

* T, in the *General Plan*.

† There is a ſtronger proof than any he has yet adduced that this chapel was built in the time of King Emanuel, that is, the letters M. R. (*Manoel Rex*) often repeated in demi-relief upon the architraves of all the upper windows of the Chapel. (Vide Fig. 17. in the Plate of Columns, Ornaments, &c.)

tached to her, as well from kindred, as on account of particular obligations he owed her, for the decided part ſhe took in promoting his acceſſion to the throne, from which King John his predeceſſor was manifeſtly averſe. Thoſe who hold this opinion add, that ſhe reſerved the beſt chapel (which is that oppoſite to the entrance) for King Emanuel, and diſtinguiſhed it by his mottos and devices, which are very different from the ſober modeſt ſtyle of King John the Firſt. The adjoining chapel ſhe intended for herſelf and her conſort. In this chapel we behold her ſapient device, which is the Pelican in the act of piercing its breaſt. But time, the ſovereign arbitrator of all human projects, has evinced the inefficacy of her deſigns, and ſhe has loſt the merit of the work by leaving unfiniſhed and expoſed to the weather an edifice worthy of being tranſmitted down to the lateſt poſterity.

I ſhould not forget to mention the ſentiments of a perſon of profound judgment reſpecting this building, and the entire monaſtery; I mean the grand maſter, *Cardinal Vincent Juſtiniano*, our General, who has ſeen and eſtimated the merits of moſt of the principal edifices of Europe, and whoſe teſtimony we can the leſs doubt, becauſe he was a ſtranger, and a perſon of the moſt religious veracity and candor. When this Father came hither, he made obſervations upon every thing worthy of notice in the Kingdom. Upon ſeeing this convent he exclaimed with admiration----*Videmus alterum Salomonis Templum.*

Of the Offerings the Founder bequeathed to the Convent.

ON the anniverſaries of the King and his Sons, offerings are allowed to the convent, conſiſting of a certain quantity of wheat, wine, and wax. And as the order of this convent originally abſtained from fleſh-meat, the pious King wiſhed likewiſe to add an offering of ſome dozens of dried whitings, of a large and wholeſome ſpecies. Theſe are of great ſervice to the community, and eaſily obtained, as the ſea-ports near the convent produce fiſh in great abundance. As the anniverſaries are many, the offerings are princely, they amount to fifty-two *moyas* and a half of wheat*, forty-three pipes of wine, twenty-four *arrobas* of wax†, and two hundred and fifteen dozen of fiſh. Theſe offerings, reduced to money, the King commanded to be paid quarterly out of his revenue by the receiver of the diſtrict of Leiria. Since the prices of theſe articles have now increaſed, they amount to a conſiderable charity, and are at preſent the principal ſuſtenance of the Fathers.

* A Moya is about 21½ buſhels, as we obſerved before.

† An Arroba is a weight of 32 lb. in Portugal.

Of the Ordinations the King commanded to be obſerved in this Convent by his Will.

"HAVING conſidered the manner the Fathers of S. Dominick uſually live in their communities, we command that the following ordinance be obſerved in the completion of the ſaid Monaſtery, and for the good ſupport and maintenance of the ſaid Fathers. For this purpoſe we command and beſeech the Infante *Duarte* my ſon, or whoever may hereafter be King and Lord of theſe realms, that he fulfill and obſerve every thing after the manner by us preſcribed. Firſt, we command that the ſaid Monaſtery be finiſhed with a cloyſter, dormitories, and all other neceſſary apartments. That they be of ſuch ample dimenſions, as ſhall be found neceſſary, and, that the expences of the ſame be defrayed out of the rents of *Leiria* and its diſtrict. That there be maintained and continued the ſame number of Friars which are in it at this time, and in the manner in which they are ſupported at preſent. That they obſerve the ſame manner of praying, and ſaying their maſſes, reſponſes, and making funeral proceſſions for my ſoul, and that of the Queen my wife----the Lord reſt her ſoul! That they offer for the benefit of my ſoul, after interment, ſuch maſſes and prayers as the ſaid Infante, or whoever may hereafter be King of theſe realms, ſhall ordain in the Monaſtery. And, that the number of thirty Fathers be kept in it, and ſupported in the undermentioned manner, and from henceforth obſerve the regulations by us ordained. And when the ſaid Monaſtery is complete in all the foreſaid neceſſary works, with the rents and taxes of Leiria and its diſtrict, that there be drawn thence ſuch ſums as ſhall be found requiſite for the maintenance of the ſaid Fathers, and for the purchaſing as many eſtates and holdings, as may decently ſupport, and provide eating, drinking, clothing and ſhoes, for the ſaid thirty Friars of the Dominican order, to wit, twenty of ſacred orders, ten Novices and Lay-Brothers, beſides a certain number of ſervants, and likewiſe a baker, cook, muleteer, laundreſs, ſhoemaker, and ſuch like perſons as may be thought neceſſary; and theſe thirty Fathers we command to live continually in the ſaid Monaſtery."

Of the Regulations the King ordained for the Government and Preſervation of the Edifice.

THE Pope, through the entreaty of the King, granted particular graces and indulgences to the Novices who take the habit in this Convent, or receive their education, or die in it. And as to bodily affairs, he did not forget to provide the Fathers with eſſentials. He ordained that a phyſician ſhould reſide continually in a neighbouring place, whence he could haſten to the indiſpoſed. To this end he was obligated, not only by a competent ſalary, but likewiſe by

certain honours, and the privilege of a phyſician to the Royal Houſehold. This he left eſtabliſhed as firm as law could enact. Nor did his prudence forget the neceſſity which all great edifices have for continual reparation; therefore he ordered an agent, with the title of Surveyor of the Works, to reſide in the vicinity, to whom a number of workmen of different trades were allowed, as often as there was neceſſity to build or repair any part, and theſe he honoured with certain exemptions and privileges. And, that there might be no faults nor delays in accompliſhing every thing that was wanting, he commanded that they ſhould be numerous, to wit, 125 ſtone-cutters, 56 quarrymen, 20 carters, 10 labourers, 1 ſmith, and only 2 carpenters; as we obſerved from the beginning, that there is no timber nor carpentry in the ſtructure, except the doors, all the reſt is ſtone and glaſs. For this claſs of people and their attendants, the honour of the privileges granted to them, was ſufficient to make them always ready without any other inducement, becauſe theſe privileges were always highly eſteemed; but when actually employed, they were paid their ordinary wages beſides.

Since the number and magnitude of the ſtained glaſs windows form a principal part of the beauty of this church; and as a thing ſo brittle is often in need of repair, the King aſſigned a particular ſum to a glazier to keep them conſtantly in order; in purſuance of which, he was bound to replace at his own coſt, whatever was damaged to the ſize of one palm, and all above that dimenſion was to be paid for in proportion, from the fund for ſimilar expences.

THE

EPITAPH OF KING JOHN I.

WE can never ſufficiently acknowledge our obligations to this Prince, for giving us a place of abode, and chooſing us for his perpetual chaplains. In teſtimony of our reverence for his venerable remains, which he ordered to be depoſited amongſt us, we ſubjoin the following memorial of his glorious achievements, word for word as engraved on his ſepulchre by order of his ſon King Edward:

IN nomine Domini, ſereniſſimus, et ſemper invictus princeps, ac victorioſiſſimus et magnificus reſplendens virtutibus, Dominus Joannes Regnorum Portugaliæ Decimus, Algarbii Sextus Rex, et poſt generale Hiſpaniæ vaſtamen primus ex Chriſtianis famoſæ civitatis Septæ in Africa potentiſſimus Dominus, præſenti tumulo extat ſepultus. Excellentiſſimus iſte Rex, nobiliſſimæ ac fideliſſimæ Civitatis Ulixbonæ ortus Anno Dom. 1358, extitit per Sereniſſimum Dominum Petrum ſuum genitorem militaribus in ætate quinquennij ibidem decoratus inſignijs: et ſuſcipiens, poſt deceſſum Regis Ferdinandi fratris ſui, ipſius Lixbonenſis urbis et aliarum complurium munitionum, quæ ſe illi ſubdiderunt, gubernamen, obſeſſam perſonaliter per Regem Caſtellæ novem menſibus Ulixbonam mari grandiſſimâ claſſe, et per terram ingenti vallatam exercitu, et plurimis Portugalenſium Regis Caſtellæ potentiam roborantibus circumſeptam, adverſus feras et multiplices impugnationes ipſam Ulixbonenſem civitatem ſtrenuiſſimè defenſavit.

Deinde nobilis civitatis Colimbricæ Anno Domini 1385, jocundiſſimè ſublimatus in Regem, per ſe et per ſuos bellicos proceres miranda exercuit guerrarum certamina: et pluries adverſantium dominia et terras intrando glorioſiſſimus triumphavit: et præcipuam, et regiam circà iſtud Monaſterium victoriam eſt adeptus: ubi Regem Caſtellæ Dominum Joannem, ſuorum maximo firmatum robore nativorum, et plurium Portugalienſium et aliorum extraneorum fultum ſubſidiis, iſte invictiſſimus Rex, virtute Dei Omnipotentis, potentiſſimè debellavit: et quamplures iſtius Regni munitiones et caſtra jam ſub hoſtium redacta poteſtate, viribus recuperavit armorum, uſque in ſuæ vitæ terminum virtuoſiſſimè protegendo. Et Deo recognoſcens, Glorioſiſſimæque Virgini Mariæ, Dominæ noſtræ, potiſſimam victoriam, quam in vigiliâ Aſſumptionis obtinuit in menſe Auguſti, hoc Monaſterium in eorum laudem ædificari mandavit, præ cæteris Hiſpaniæ ſingularius et decentius. Et ſoli Deo optans honorem et gloriam exhiberi, et tantùm ipſi aut propter eum majoritatem fore cognoſcendam deſcriptionem, quæ ſuorum prædeceſſorum temporibus in publicis ſcripturis ſub Ærâ Cæſaris notabatur, decrevit ſub Anno Domini noſtri Jeſu fore de cætero annotandam. Hoc actum eſt Ærâ Cæſaris M.CCCC.LX. et Anno Domini 1422, tempore aliter defluendo.

Iſte feliciſſimus Rex, non minus reperiens quæ ſuſceperat regna illicitis ſubjecta moribus, quam fævis hoſtibus, ipſa expurgavit cum diligentiâ ſalutari, et propriis actibus virtuoſis uſitata facinora extirpando, pullulare fecit in his Regnis probitates honeſtas: et ſollicitus ad pacem cum Chriſtianis amplectendam, eandem ante proprium deceſſum pro ſe ſuiſque ſucceſſoribus obtinuit perpetuam. Et ſuccenſus fidei fervore, iſte Chriſtianiſſimus Rex, comitante eundem Sereniſſimo Infante Domino Eduardo ſuo filio et hærede, et Infante Domino Petro, et Infante Domino Henriquo, et Domino Alfonſo Comite de Barcellos, præfati Regis filiis, et ingenti ſuorum naturalium impavidâ ſociatus potentiâ, cum maximâ claſſe plus quam ducentis viginti aggregatâ navigiis, quorum pars numeroſior maiores naves et grandiores extitere triremes, in Africam transfretavit, et die primâ quâ telluri Afrorum impreſſit veſtigia, nobilem et munitiſſimam civitatem Septam oppugnando in ſuam poteſtatem redegit mirificè, et poſtmodo eidem urbi plus quam centum mille (ut aſſeritur) Agarenorum ultramarinis, et Granatæ pugnatoribus obſeſſæ idem glorioſiſſimus Rex per ſuos illuſtres genitos, Infantem Dominum Henricum, et Infantem Dominum Joannem, et Dominum Alfonſum Comitem de Barcellos, et alios Dominos, et Generoſos ſuccurſum miſit: qui fugantes de obſidione Agarenos quamplurimos in ore gladii trucidando; ipſorum claſſe ſubmerſione, incendio, et captura conquaſſata; prædictam liberavit civitatem Septam: quam decem et octo annis minus octo diebus Anno Domini 1433, in menſe Auguſti, vigiliâ Aſſumptionis Sanctiſſimæ Mariæ Virginis terminatis adverſus bellicos Agarenorum multiplicatos, inſultus validiſſimè præſidiavit.

Menſe autem et vigiliâ prædictis, iſte glorioſiſſimus Rex in civitate Ulixbonæ, aſſiſtentibus ſuis filiis et aliis quamplurimis generoſis, vitam feliciter complevit mortalem, relinquens notabilem urbem Septam ſub poteſtate altiſſimi potentiſſimique Domini Eduardi filii eius, qui paternos actus viriliter imitando, eandem in fide Jeſu Chriſti nititur proſperè gubernare. Iſte autem excellentiſſimus et virtuoſiſſimus Rex Dominus Eduardus tranſtulit honorantiſſimè corpus Chriſtianiſſimi Regis patris ſui, aſſiſtentibus eidem ſuis germanis, Infante Domino Petro Duce Colimbriæ, et Montis Majoris Domino; Infante D. Henrico Duce de Viſeo, et Domino Covillianæ, et Gobernatore Magiſtratûs Chriſti; Infante Domino Joanne Comiteſtabili Portugaliæ et Gobernatore Magiſtratûs Sancti Jacobi; et Infante Domino Ferdinando, et Domino Alfonſo, Comite de Barcellos, filiis præfati Regis Domini Joannis, qui tempore ſui obitûs alios non habebat, præter duas filias, quarum una erat Domina Infans Eliſabeth,

Ducissa Burgundiæ et Comitissa Flandriæ, et aliorum Ducatûum et Comitatûum: et alia Domina Beatrix Comitissa Hontinto, et Arondel, quæ in suis terris permanebant. Habebat autem Dominus Joannes nepotes qui Dominicæ translationi affuerunt, Dominum Alfonsum Comitem de Ourem, et Dominum Ferdinandum Comitem de Arrayolos, filios Comitis de Barcellos: et habebat nepotem Dominum Infantem Alfonsum primogenitum Domini Eduardi, et alios nepotes, et pronepotes, qui annumerati cum filiis erant viginti, tempore quo de præsenti sæculo migravit ad Dominum.

Affuerunt etiam hujus translationis celebritati omnes qui tunc in Cathedralibus Ecclesiis istorum Regnorum Prælati erant, et alii complures, cum multitudine Clericorum et Religiosorum coplosâ: et Domini et Generosi hujus patriæ, civitatum etiam et munitionum Procuratores extitere præsentes. Fuit autem venerandissimè delatum Regium Corpus ejus ad istud Monasterium trigesimâ die Novembris Anno Domini supradicto, et in Capellâ majori cum excellentissimâ, et honestissimâ, et Christianissimâ Dominâ Philippâ ejus unicâ uxore, prædictorum Regis Eduardi et Infantum, et Ducissâ illustrissimâ genitrice. Anno vero sequenti, die decimâ quartâ mensis Augusti, fuere per Regem Eduardum, et Infantes et Comites prælibata corpora prædictorum Regis, et Reginæ Philippæ cum honore mirifico ad hanc Capellam delata, quam ædificari pro sua sepulturâ imperavit, et huic deductioni extitere præsentes altissima et excellentissima princeps Domina Leonor horum Regnorum Regina, et Infans Domina Elisabeth Ducissa Colimbriæ, et Infans Domina Elisabeth uxor Infantis Domini Joannis, et præcipua pars Dominorum et Generosorum istius terræ, qui interfuerunt sepulturis prædictorum Dominorum Regis et Reginæ, quibus Deus suâ miseratione et pietate largiri dignetur sine fine fælicitatem. Amen.

THE

EPITAPH OF QUEEN PHILIPPA.

In gratitude to the memory of this most virtuous and excellent Queen, the consort of so great a King and the mother of so many illustrious Princes, we give the following Epitaph, which was dictated by her Royal Husband, and engraved on her tomb by command of King Edward her son:

HÆC felicissima Regina à puellari ætate, usque in suæ terminum vitæ, fuit Deo devotissima: et divinis officiis ecclesiasticè confuetis tam diligenter intenta, quod clerici et devoti erant religiosè per eandem sæpius eruditi: in oratione autem tam continua, quod demptis temporibus gubernationi vitæ necessariis, contemplationi aut lectioni, seu devotæ orationi totum residuum applicabat. Plurimum vero fideliſſimè dilexit proprium virum: et moralissimè proprios filios castigando virtuosissima doctrinavit: et bona temporalia circà Ecclesias et Monasteria distribuendo pauperibus plurima erogabat; generosis Domicellis maritandis manus liberalissimas porrigebat. Erat enim integra populi amatrix et pacis plena desideratrix, et efficax adjutrix ad pacem habendam cum Christicolis universis, et libenter assentiens in devastationem infidelium pro Dei injuriâ vindicandâ: et tantum prona etiam ad indulgentiam, quod nunquam accepit de sibi errantibus, nec consensit vindictam fieri aliqualem. Virtuosissima ista Domina extitit fœminis maritatis bene vivendi regulare exemplar, Domicellis directio, et totius honestatis occasio; cunctisque suis subjectis fuit curialis urbanitatis moderatissima doctrix. In his autem et aliis quamplurimis perseverando virtutibus, quarum plurimitatem hujus lapidis humilitas nequiret ullatenùs præsentare, dictim et continuè pervenit ad istius vivendæ mortalis limitem ordinatum; et sicut ejus vita fuit optima et valde sacra, sic mors extitit preciosa in conspectu Domini, et nimium glorioſa: et, receptis laudabiliter omnibus Ecclesiasticis sacramentis, proprios filios benedixit, commendans eisdem quæ intendebat fore ad divinum obsequium et honorem et profectum istorum Regnorum, et quæ in eis sperabat causatura crementum indubiè: virtuosissimè, taliterque hujus mundi labores finaliter adimplevit, quod præsentes, qui relata audierunt, firmam suæ salvationis spem retinent singularem. Obiit autem decimâ octavâ die Julii Anno Domini 1415, et in Monasterio de Odivellis ante chorum Monialium decimâ nonâ die mensis ejusdem extitit sepulta: et anno sequenti, mensis Octobris die nonâ fuit prætiosum corpus ejus desepultum, integrum inventum et suaviter odoriferum, et per victoriosissimum Regem Dominum Joannem ejus conjugem, et per Serenissimos Infantes, scilicet, Dominum Eduardum suum primogenitum, et Dominum Petrum Colimbriæ Ducem, et Dominum Henricum Ducem Visеensem, et Dominum Joannem, et Dominum Fernandum, et Infantem Dominam Elisabeth, ipsius gloriosissimi Regis et felicissimæ Reginæ filios; sociante Prælatorum, et Clericorum et Religiosorum copiâ numerosâ, et Dominis et generosis Dominabus, et Domicellis quamplurimis comitantibus, fuit corpus dictæ Reginæ honorandissimè translatum ad istud Monasterium de Victoriâ, et tumulatum in Capellâ majori et principaliori, die mensis Octobris decimâ quintâ Anno Domini 1416; et postea fuit translatum ad hanc Capellam, in hoc tumulo reconditum cum corpore gloriosissimi Regis Domini Joannis, sui conjugis virtuosissimi, sub illâ formâ quæ in suo epitaphio continetur. Horum autem personas Deus omnipotens glorificare dignetur perpetuâ fælicitate. Amen.

END OF DE SOUSA'S HISTORY.

A Paper, of which the following is a Tranſlation, I am indebted for to the Journal of the Right Honourable WILLIAM CONYNGHAM. *The Original is in French, and appears to have been written by one of the Fathers of Batalha for the above Gentleman when he viſited the Monaſtery in* 1783.

AN

ACCOUNT

OF THE

MODERN ESTABLISHMENT

OF THE

ROYAL CONVENT OF BATALHA.

THE number of Friars reſiding in the Convent are forty-four, of the Dominican order; to wit, twenty-five in ſacred orders; two Deacons; four Novices; and thirteen Lay-brothers. They are governed by a Prior and three ſubordinate dignitaries, viz. a Rector of Novices, a Vicar, and a Maſter of Morals. There are two Profeſſors for teaching grammar to ſeculars, and another for inſtructing them to read and write. The other officers of the Monaſtery are, the *Sacriſt*, *Precentor*, *Cellerarius*, *Granatarius*, and the *Eleemoſynarius*. There are alſo two Treaſurers under the direction of the Prior; each has a ſeparate key of the cheſt, which contains the ſtock of the community.

The annual revenue of the Convent is computed at between ten and twelve thouſand cruzados *, according to the ſale of the fruit. The fixed revenue is 3,000 cruzados and forty *moyas* † of wheat, beſides 200 *mil reis* received annually from the cuſtom-houſe of Oporto.

The diſburſements amount on an average to 7,000 cruzados a year. Each Friar is allowed 4,800 *reis* ‡ for his clothing. The tillage of the eſtate called *Quinta da Vorgea* amounts to 400 *mil reis* per annum; at preſent it is farmed for one half of its produce. There are alſo let out four mills, one of flour and three of oil. In rebuilding the Dominican Church at Liſbon, which had been deſtroyed by the great earthquake, the Convent contributes 300 *mil reis* annually. The expences attending the Church, in wax, &c. amount to 200 *mil reis*. The remainder of the income is expended in repairs and other contingencies.

There are fourteen ſervants belonging to the Monaſtery. The cook is allowed 4,800 *reis* a year, and wine at diſcretion. The carters have but three moidores a year without victuals, except two, who are allowed four moidores. The ſhepherd and ſwineherd have each 600 *reis* a month, and four *alqueires* of maize. The two boys who attend the Sacriſty and Choir have no fixed ſalary.

Every year the Convent has four feaſts and two days of double allowance; the ordinary allowance of each Father is 1¼ lb. of meat, and the ſame quantity of fiſh; beſides wine, fruit, &c.

* A cruzado (*vello*) is worth 2s. 3d. † A *moya* contains about 21½ buſhels. ‡ A thouſand *reis* is equal to 5s. 7½d.

A Deſcription of the ſeveral Parts of the General Plan.

	Feet.	In.
THE length of the Building from the Weſtern entrance at A to the Eaſtern extremity at Z -	416	7¾
The extent of the Church and Monaſtery from Y to B, North and South - - -	541	0½

C The Mauſoleum of King John the Firſt.
D The Church.
E The Tranſept.
a Stairs leading to the Roof of the Church.
b Stairs leading to the Organ-loft, Roof of North Aiſle, &c.
c The ſituation of the Organ.
d The Pulpit.
F An Altar dedicated to our Saviour.
G The Choir.
e The High Altar dedicated to GOD.
H Chapel of our Lady of the Aſſumption.
I Chapel of our Lady of the Roſary.
J Chapel of our Lady of Mercy.
K Chapel of St. Michael.
L The Sacriſty.
M The Tower over which the Spire is built.
N *Caza da Prata*, or Room where the Plate, Relicks, &c. are depoſited.
O Chapter-houſe.
P Loggia of the Mauſoleum of King Emanuel.
Q Receſſes for Altars.
f. f Small Receſſes to contain the Phials with the Elements uſed in the Celebration of the Holy Sacrament.
R Mauſoleum of King Emanuel.
S Chapels.
T The Chapel intended for King Emanuel.
g Apparently intended as a Repoſitory for the Veſtments of the Clergy.
V Excavations evidently intended for Sepulchres.
h The Entrance to the Excavations, which is filled up with hewn Stone without Cement.
i Stairs leading to the Platform over the Chapels.
W The Royal Cloiſter.
W W The Walks of the Cloiſter, through which the Friars and Novices paſs in Proceſſion from the Choir to the Refectory and back again, chanting grace before and after dinner *.
X A Garden.
k Ciſtern.
A Great Fountain.
B Refectory.
l Prior's Seat.
m The Pulpit, where one of the Novices reads the Holy Scripture whilſt the Friars are at their meals.
n Apertures where two of the Novices receive the diſhes from the Cook, which they carry to the Friars.
C The Kitchen.
D The Larder.
E A ſmall Refectory, where the Prior and ſome of the principal Fathers occaſionally dine.
F The Wine and Fruit Cellar.
G The Hall where the Profeſſors give Lectures.
H The Sacriſt's Store-room.
o The Belfry.
p Stairs leading to Prior's Apartments, &c.
I An open Arcade, where the Laundreſſes, &c. belonging to the Convent are permitted to enter.
Y The School.
q Stairs leading to the Wheel of the Lay Brothers' Corridor.
K Servants' Hall.
r Stairs leading to the principal Cells.
s Corridor leading to the Church.
f Wax Chandler's Room.
L Servants' Cloiſter.
M A Court planted with Orange-trees.
N Lay Brothers' Cloiſter.
O A Garden.
P Novices' Cloiſter.
Q Novices' Garden.
R Store for Fuel.
S Oil Magazine.
T Wine Preſs.
t t Labourers' Store-rooms.
v v Artificers' Store-rooms.
V *Cloaca.*
w Stairs leading from the Dormitories to the Refectory.
x Servants' Cell.
W Magazines for proviſions.
X Granary.
y Corridor.
z Stairs leading to Lay Brothers' Cells.
Y Labourers' Apartments.
Z Prior's Coach-houſe and Stable.
a a Stalls for Cattle.
b b Repoſitory for Implements of Huſbandry.
I. II. III. IV. Comprehends the ſpace finiſhed during the life-time of the Founder.
I. II. VI. V. Comprehends the ſpace built by King *Edward*, Son of the Founder.

References to the Tombs.

a Tomb of King John the Firſt and Queen Philippa his Conſort.
b Tomb of *Don Pedro*, Duke of Coimbra, Knight of the Garter, &c.
c Tomb of *Don Anrique*, Duke of Viſeu, Knight of the Garter, &c.
d Tomb of Don John, Maſter of the Order of *Santiago*, &c.

* The Novices walk firſt, and the Prior laſt, in the proceſſion coming from the Refectory. In going thither the contrary order is obſerved.

e Tomb of the Infante *Don Fernando*.
N. B. The above Princes were Sons of King John the Firſt.
f Tomb of King *Edward* and Queen *Lianor*.
g Tomb of King John the Second.
h Tomb of *Don Lopo Diaz de Souſa* *.
i Tomb of *Dona Mecia*, wife of the *Condé de Miranda*, *Anrique de Souſa*.
k Tomb of Dona Iſabel, Queen of Alfonſo the Fifth.
l Tomb of a Cardinal whoſe name and family are unknown.
m Tomb of King Alfonſo V.
n Tomb of Prince Alfonſo, ſon of John II.
o A Tomb-ſtone on which is carved in relief a large Gothic D, ſurrounded with a glory. It is thought to be the Tomb of *Don Diogo Gonſalvez Traveſſos*, a great favourite of King John I.
p A plain Tomb-ſtone, without any inſcription, under which, it is ſaid, lies a Soldier who ſaved King John's life in battle.

Near the entrance of the Church are the Names of the following Workmen, who are there interred.

Firſt Maſter Workmen.

Meſtre Matheos. Portugueſe. 1515.
Meſtre Congiate. A ſtranger.
Meſtre Conrado. A ſtranger.

Firſt Maſter Workmen for the Windows.

Meſtre Ugado. A ſtranger.
Meſtre Whitaker. A ſtranger.

Ornaments, Mottos, &c. appertaining to the Royal Monaſtery of Batalha.

Figures 1, 2, 3, and 4. Capitals in the Nave of the Church.
Fig. 5. A Capital in one of the Windows. North Front.
6. ——— in the Arcade of the Royal Cloiſter.
7. ——— in one of the Windows. South Front.
8, ——— in the Mauſoleum of the Founder.
9. ——— in the Weſtern Porch.
10. ——— in the Tranſept entrance.
11. A Corbel ſupporting the Precentor's ſeat in the Choir.
12. Ornaments appended to the Intrados of the Arches in the Mauſoleum of the Founder.
13. An Ornament in one of the Arches of the great Fountain.
14. A Specimen of the Ornaments placed on the Arches of contrary Flexion. Weſt Front.
15. One of the Ornaments on the Angles of the Spire.
16. Profile of the above Ornament.
17 and 18. Pateras of the Pendent Orbs in the Chapter Houſe.
19. A mural Font in the Mauſoleum of the Founder.
20. A Patera in the centre Vault of the above Mauſoleum.
21. A Patera in one of the Aiſle Vaults of the Church.
22. A Figure ſupporting one of the Ribs of the Vault in the Chapter Houſe, ſuppoſed to repreſent the Architect of that Fabrick.
23. John the Firſt's Sword and Battle-axe.
24. John the Firſt's Helmet.
25. John the Second's Sword and Battle-axe.
26. Ornaments of the Mauſoleum of the Founder, externally.
27. A Tablet in the front of a ſmall Houſe oppoſite to the Church, ſaid to be wrought by the Workmen of Batalha.
No. 28. Motto on the Tomb of King John the Firſt.
No. 29. —— on the Tomb of Don Pedro.
No. 30. —— on the Tomb of Don *Anrique*.
No. 31. —— on the Tomb of Don John.

Columns, Ornaments, and Hieroglyphicks in the Mauſoleum of King Emanuel.

Figures 1, 2, 3, 4, 5, and 6. Columns at the entrance of the Mauſoleum.
Fig. 7. Pedeſtal of the above Columns.
8. In each Angle of the Octagon, there is a Column like this, from the Top of which the Ribs of the intended Vault commence.
9. Hieroglyphicks at the Entrance of the Mauſoleum.
10. Ornaments in the intervening ſpaces of the Columns at the Entrance.
11. Architrave, Frieze, and Cornice of the Mauſoleum. Internally.
12, 13, and 14. Vaſes on the Pedeſtals and Pilaſters of the intended Orcheſtre.
15. An Ornament over the Loggia.
16. A Baluſter in front of the intended Orcheſtre.
17. The Initials of the Founder's name, i. e. *Manoel Rex*. Theſe letters are often repeated on the Architraves of the large Windows of the Octagon.

† This tomb is modern, but well deſigned and executed in different kinds of marble; and ſupported by three couchant lions of Sienna, with their paws reſting upon as many balls, intended, I ſuppoſe, to indicate mutability. The top of the monument is finiſhed with a ducal coronet reſting upon a cuſhion, and ſupported by two weeping figures of Carara marble. In the middle is a tablet, handſomely ornamented, bearing the following letters,

X · R · P · M · H · S · E

The meaning of theſe letters, according to the Almoner of the Convent, is as follows,

Decima, Regia, Perſona, Maſculina, Hic Sepulta Eſt.

OBSERVATION.

THE Work from which we have tranſlated the foregoing Account of Batalha, entitled *Hiſtoria de St. Dominingos*, was publiſhed at Liſbon in the year 1622, under the names of Cacegas and De Souſa. The former, who was hiſtoriographer to the Dominican Order in the Portugueſe dominſons, firſt compiled the Hiſtory of that Order; and ſome years after it was continued by De Souſa, who alſo made many alterations in, and additions to, what his predeceſſor had written. From the ſuperiority this writer poſſeſſed as an hiſtorian over Cacegas, and the approbation his labours received from the literati of Portugal, the Work at preſent bears the title of De Souſa's Hiſtory of the Dominican Order.

From this Hiſtory I have ſelected ſuch facts as appeared eſſential to my purpoſe, and no more; and even the paſſages thus ſelected are not always rendered word for word with the original text. Where the author had either miſtook or miſunderſtood the terms of architecture, which indeed is excuſable in an hiſtorian, I thought myſelf authorifed in giving them their proper names. I have alſo corrected the dimenſions he aſſigns to ſome parts of the edifice when I found them wrong, and inſerted the real meaſurements in their place, in feet and inches. As it would be tedious and unintereſting to enter upon a diſcuſſion with my Author on theſe points, I generally omitted to notice them. Such are the liberties taken with Father De Souſa's Account of Batalha in the foregoing Tranſlation, of which I thought it neceſſary to appriſe the Reader.

MEMOIRS OF FATHER LEWIS DE SOUSA.

AS the circumſtance which induced our Author to ſeclude himſelf from the world and become a Friar is rather ſingular, a ſhort account of it may not be unacceptable.

In 1578, when Don Sebaſtian King of Portugal was defeated and ſlain in a pitched battle againſt Muly Moloch Emperor of Morocco, many of the nobility of Portugal, who accompanied him, ſhared the ſame fate; and others who fell into the enemy's hands were made captives.

Amongſt the gentlemen who accompanied King Sebaſtian in this unfortunate expedition, was one whoſe name the Biographer has omitted; it was included, however, in the return of the ſlain. When his wife, who reſided in Liſbon, received the intelligence, ſhe nevertheleſs entertained hopes that it might have been a miſtake, and that Heaven would yet favour her with a ſight of him.

Under this pleaſing expectation ſhe remained ten years, notwithſtanding the repeated accounts ſhe received from the agents employed to redeem the captives confirmed the relation of his death. Her friends, who were convinced of the truth of it, entreated her to relinquiſh the idea of ever ſeeing him, and to enter once more into the marriage ſtate.

Souſa at this time moved in the firſt circles of faſhion; his company was much ſought for, as he was an excellent ſcholar, as well as an accompliſhed gentleman. He paid his addreſſes to this lady; her incredulity reſpecting her huſband's death at this time began to give way, and ſhe was prevailed on by her relations to give him her hand.

Accordingly they were married, and lived together in the greateſt harmony. But it was of ſhort duration: a merchant from Africa arrived in Liſbon, ſought out the lady, and informed her, that he was charged with a commiſſion from her huſband, who was in captivity, and relied upon her affection to expedite his releaſe.

The unfortunate woman, quite overwhelmed with ſhame and ſurpriſe, in this affecting dilemma aſked De Souſa's advice, who was alſo aſtoniſhed at the news. As he was a prudent and conſcientious man, he reſolved to be guided in a matter of ſuch delicacy by the pureſt dictates of honour.

In the firſt place, in order to aſcertain the fact, he had recourſe to an ingenious expedient: he conducted the meſſenger to a picture-gallery in his houſe, and told him that a portrait of the gentleman whom he affirmed to have ſeen was in the collection, and requeſted him to point it out, as a proof that there was no miſtake in his declaration. The merchant endeavoured to excuſe himſelf, ſaying that a long ſtate of ſervitude aud cruel treatment had made ſuch a change in the captive gentleman, that he doubted if his moſt intimate friends could recognize him if he were preſent: nevertheleſs, ſays he, ſome leading features induce me to think that this is his portrait, pointing to the identical one. Souſa from this and other collateral circumſtances was now convinced of the truth of the whole, and applauded the merchant for his humanity.

This affair affected Souſa very much: he deliberated with himſelf in what manner to act; at length he reſolved, having no children to provide for, to retire from the world and ſeclude himſelf in a monaſtery. The wife approved the reſolution; and, as a proof of her grief and affection, retired alſo into a nunnery near Liſbon. But previous to their ſeclufion, they uſed every means in their power to reſcue the unfortunate gentleman from captivity.

Souſa now entered into the Dominican Order, and lived in the Convent of Bemfica near Liſbon. The Fathers of this Order, deſirous of completing the Hiſtory of their Foundation, thought this a favourable opportunity; and knowing Souſa to be a man of great talents, they requeſted him to undertake the taſk, and perfect what Cacegas, a Friar of the ſame Order, had begun. He accordingly ſet about it, and, after many years labour, publiſhed it in 1619, under the name of Cacegas and his own; thus, from his extreme modeſty, dividing the honour of the work, the whole of which he could juſtly claim as his own. But poſterity has done juſtice to his memory, and Cacegas's name is now remembered only through De Souſa's works.

His facts are ſaid to be accurate and well arranged; his deductions natural and ſolid; his ſtyle throughout is ſimple and nervous; and, what adds greater honour to his memory, he was a man of exemplary piety and humanity.

FINIS.

DIRECTIONS FOR PLACING THE PLATES.

THE Dedication to precede the Preface.

Plates 1, 2, 3, 4, Introduction; and the Tranſverſe Section of the Church; after the Introduction.

The reſt of the Plates to be placed after the Hiſtory, in the following Order:

General Plan.
North Elevation of the Church, &c.
Longitudinal Section of the Church.
Elevation of the Chancel.
Section of the Chapter Houſe.
Elevation of the Refectory.
Weſt Elevation of the Church.
Elevation of the Tranſept Entrance.
Interior View of the Church.
Elevation of the Mauſoleum of King John.
Section of the Mauſoleum of King John.
Effigies of King John and Queen Philippa.
Entrance to the Mauſoleum of King Emanuel.
Deſign for completing the Mauſoleum of K. Emanuel.
Arches appertaining to the Mauſoleum of K. Emanuel.
Ornaments, Mottos, &c.
Columns, Ornaments, and Hieroglyphicks.
Elevation of the Pillars of the Church.
Elevation and Section of the Spire.
Rails, Cornices, and Arched Modillions.

Total, Twenty-ſeven with the Title.

LIST OF SUBSCRIBERS.

HIS BRITANNIC MAJESTY.

HER MOST FAITHFUL MAJESTY.

HIS ROYAL HIGHNESS THE PRINCE OF BRAZIL, 10 ſets.

HER ROYAL HIGHNESS THE PRINCESS OF BRAZIL.

HER ROYAL HIGHNESS THE PRINCESS DOWAGER OF BRAZIL.

HER ROYAL HIGHNESS THE PRINCESS SOPHIA OF GLOUCESTER.

A

CHEVALIER de Almeida, Portugueſe Ambaſſador at London.
Viſcount de Anadia, Portugueſe Ambaſſador at Berlin.
Viſcount de Aſſeca, Liſbon.
Don Antaõ de Almada, Liſbon.
Monſenhor Acciaolli, Liſbon, 3 ſets.
Don Bernardin Freire de Almada, Liſbon.
Earl of Aylesford.
Mr. Andrade.
Mr. Archer, Dublin.
Richard Amies, Eſq. Liſbon.
John Armſtrong, Eſq. Architect.

B

Cardinal Belliſomi, Nuncio at Liſbon.
Biſhop of Beja, Portugal.
Biſhop of Caſtello Branco, Portugal.
Sir Joſeph Banks, Bart. P. R. S. F. S. A. &c.
Owen Saluſbury Brereton, Eſq. F. R. S. F. S. A.
William Beckford, Eſq.
William Boſville, Eſq. F. R. S.
John Thomas Batt, Eſq.
Richard Bullock, Eſq.
Richard Buller, Eſq.
George Byfield, Eſq. Architect.
Mr. John Berril, Dublin.
Mr. Richard Butler, Dublin.
Richard Burn, Eſq. Liſbon, 2 ſets.
Francis Beaſley, Eſq. Oporto.
William Boys, Eſq.
Charles Beazley, Eſq. Architect.
Sir Francis Blake, Bart.
Edward Burton, Eſq.
Thomas Barrett, Eſq.
Charles Bulfinch, Eſq. Boſton, America.
Col. Bieſter, Liſbon.

C

Right Honourable William Conyngham, M. R. I. A. F. S. A. &c. 10 ſets.
Lord Viſcount Conyngham.
Lord Camelford.
Biſhop of Cloyne.
R. Pole Carew, Eſq. M. P.
John Clements, Eſq.
Sir William Chambers, K. P. S. F. R. S. R. A. &c. Architect to the Queen.
Charles Cameron, Eſq. Peterſburg, Architect to the Empreſs of Ruſſia, 2 ſets.
John Haydon Cardew, Eſq.
Thomas Collins, Eſq. M. P. R. M. T.
Meſſrs. Colnaghi and Co.
John Coltsman, Eſq. Liſbon.
Denis Connell, jun. Eſq. Oporto.
R. M. T. Chiſwell, Eſq. M. P.
George Cooke, Eſq.
John Claxton, Eſq. F. A. S.
Mr. W. Cole, Architect.
Mr. Crace.
William Carr, Eſq. Architect.
Senhor Joaõ Vidal da Coſta, Portugal.

D

Lord Viſcount Dillon.
George Dance, Eſq. Architect to the City of London.
Gerard Deviſme, Eſq.
Mr. Timothy Doyle, Dublin.
Mr. Whitmore Davis, Architect, Dublin.
George Dohrman, Eſq. Liſbon.
William Danby, Eſq.
Samuel Dobrée, Eſq.

E

Earl of Exeter.
Count de Ega, Liſbon.
Mr. John Edwards.
Rev. John Eyre.
Mr. Elmſley.

F

Don Miguel Frojaz, Liſbon.
Monſenhor Freire, Liſbon.
William Fauquier, Eſq.
Mr. Fry.
Mr. Thomas Frazer.
Mr. John Foſter, jun. Architect.
Dr. Antonio Mendes Franco, Liſbon.

G

Count Gervazone, Liſbon.
Richard Gough, Eſq. F. R. S. F. S. A.
Dr. Gray, F. R. S.
Sir Richard St. George, Bart.
Mr. Thomas Gowland.
William Gonne, Eſq. Liſbon.
Walter Groſett, Eſq. Liſbon.
Timothy Goodall, Eſq. Liſbon.
Abbé Garnier, Chaplain to the French Factory, Liſbon, 2 ſets.
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John Groves, jun. Eſq. Architect.

H

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Sir John Hort, Bart.
Sir James Hall, Bart.
Sir Richard Hoare, Bart.
Rev. Herbert Hill, M. A. Chaplain to the Britiſh Factory, Liſbon, 2 ſets.
Mrs. Harcourt.
John Heathcote, Eſq.
Adair Hawkins, Eſq.
Capt. Hanchet.
Charles Hoane, Eſq.
Mr. John Hartwell, Dublin.
Mr. Daniel Harris, Architect.
Richard Holland, Eſq. Architect.
Mr. John Joſiah Holford.
George Harding, Eſq. M. P.
Benjamin Harriſon, Eſq. Liſbon.
Peter Henry Henrichſen, Eſq. Liſbon.
Mr. John Hurſt.

J

John James, Eſq.
Colonel Johnes, M. P.
Rev. T. Jones, M. A.
Joſeph Johnſton, Eſq.
Bromley Illius, Eſq. Liſbon.
Richard Jupp, Eſq. Architect.

K

Edward King, Eſq. F. R. S. and F. S. A.
J. T. Koſter, Eſq. Liſbon, 2 ſets.
I. A. Kantzon, Eſq. his Swediſh Majeſty's Agent at the Court of Liſbon.

L

Marquis of Lanſdown.
Earl of Leiceſter, P. S. A. and F. R. S.
Lord Liſmore.
William Lock, Eſq. F. R. S. and F. S. A.
Charles Lambert, Eſq. F. S. A.
Thomas Lane, Eſq.

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Senhor Joaõ Gabriel Lobo, Liſbon.

M

Marquis das Minhas, Liſbon, 4 ſets.
Marquis de Marialva, Liſbon.
Marquis de Caſtello Melhor, Liſbon.
Earl of Mount Edgcumbe.
Earl of Moira.
Counteſs of Moira.
Charles Marſh, Eſq. F. S. A.
William Meredith, Eſq.
——— Mc Gowan, Eſq.
Joſeph May, Eſq.
Robert Mitchell, Eſq. Architect.
Mr. Michael Murphy, Dublin.
Mr. Richard Morriſon, Architect, Dublin.
Charles Murray, Eſq. Conſul General at Madeira.
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John Henry Metzener, Eſq. Liſbon.
Mr. T. Milton.
Joſeph Muſgrave, Eſq.
Henry Mairs, Eſq.
Senhor Jozé de Coſta Mourao, Liſbon.

N

Duke of Norfolk, 4 ſets.
Duke of Northumberland, 2 ſets.
Hon. Mrs. O'Neale.
Sir Roger Newdigate, Bart.
Mr. George Nicols.
William Naſh, Eſq. Oporto.
John Naſh, Eſq. Architect.
William Northey, Eſq.
Rev. P. Newcombe.

O

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Earl of Upper Oſſory.
John Frederic Oſtervald, Eſq. *Charge d'Affaires, Liſbon.*
Rev. Hugh Owen.

P

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Chevalier Pinto, Secretary of State, Liſbon, 6 ſets.
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John Peachy, Eſq. F. R. S.
Roger Palmer, Eſq.
Thomas Pennant, Eſq.
Mr. John Plaw, Architect.
Mr. Thomas Payne.
William Porden, Eſq. Architect.
Mr. Pilkington.
Thomas Powell, Eſq.

Q

Don Pedro Joaquim Quintella, Liſbon.
Doctor Quin, Dublin.

R

Sir George Robinſon.
William Reveley, Eſq. Architect.
Alvez Rebello, Eſq.

S

Earl Spencer.
Chev. de Souſa, Portugueſe Ambaſſador at Stockholm.
Chev. de Souſa, Portugueſe Ambaſſador at Copenhagen.
William Seward, Eſq. F. R. S. and F. S. A.
Hugh Skeys, Eſq. Dublin, 2 ſets.
Sir Richard St. George, Dublin.
Thomas Sikes, Eſq.
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Captain Smith.
John Soane, Eſq. Architect to the Bank of England.
Mr. Dias Santos.
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Senhor Joaõ Correa de Saá, Liſbon.
John Searle, Eſq. Oporto.
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Joſeph Sill, Eſq. Liſbon.
Richard Sealy, Eſq. Liſbon.
Senhor Manoel Caetano de Souſa, Liſbon.
William Stephens, Eſq. Marinha Grande, Portugal, 16 ſets.
Senhor Joaõ Vidal de Coſta e Souſa, Liſbon.
Mr. Alexander Stevens, Architect.
Sir Chriſtopher Sykes, Bart.
Senhor Jozé Antonio da Sylveira, Liſbon.
Lourenço Rodrigues de Sá, Eſq.

T

John Topham, Eſq. F. S. A.
—— Todd, Eſq.
Richard Townſend, Eſq. M. D. Dublin.
Mr. Richard Tawney, Architect.
Mr. W. Todd.

V

Count de St. Vincent, Liſbon.
Mr. John Upward.
Timothy Verdier, Eſq. Liſbon.

W

Hon. Robert Walpole, Britiſh Envoy, Liſbon.
Joſeph Windham, Eſq. F. S. A.
William Watſon, Eſq. F. R. S.
Miſs Walker.
William Webb, Eſq.
Dr. Willis.
John Woodhouſe, Eſq.
Daniel Whalley, Eſq.
Benjamin Weſt, Eſq. P. R. A. Painter to his Majeſty.
James Wyatt, Eſq. R. A. Architect to his Majeſty.
Mr. Thomas Whetten, Architect.
Joſeph Cooper Walker, Eſq. M. R. I. A. Dublin.
William Whitehead, Eſq. Britiſh Conſul at Oporto.
William Warre, Eſq. Oporto.
Mr. Thomas Wright.
Mr. Watſon.
Mr. Jeffery Wyatt.
Mr. Waters.

Y

Hon. John Yorke.
Sir George Young, Bart. F. R. S.

Colleges and Libraries.

His Majeſty's Library.
Antiquary Society.
Royal Academy.
Britiſh Muſeum.
Trinity College, Dublin.
Royal Iriſh Academy.
Dublin Society.
Royal Convent of Batalha.
Univerſity of Coimbra.
Leeds Library.
Charles Town Library, South Carolina.
Royal Library, Gottingen.

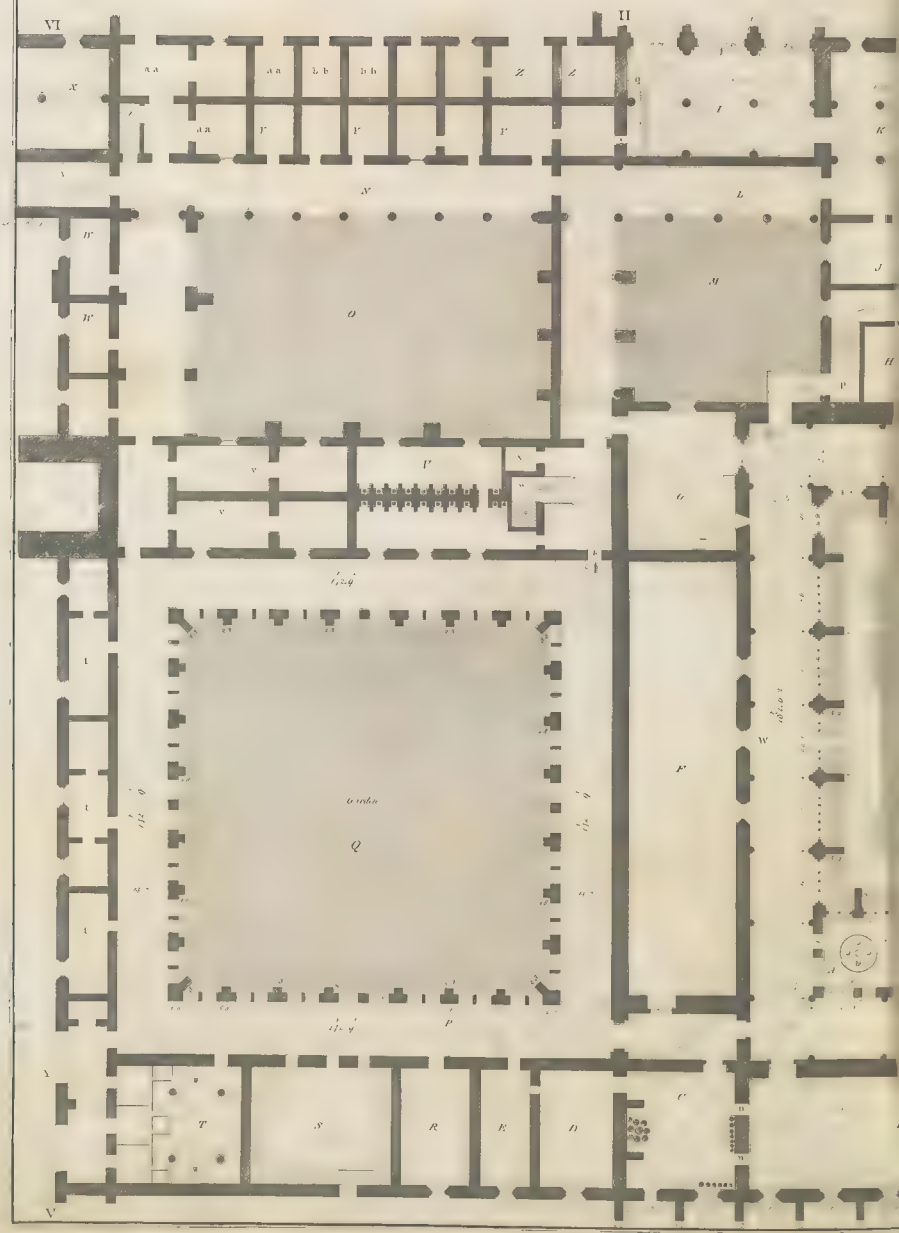
ADDITIONAL NOTE.

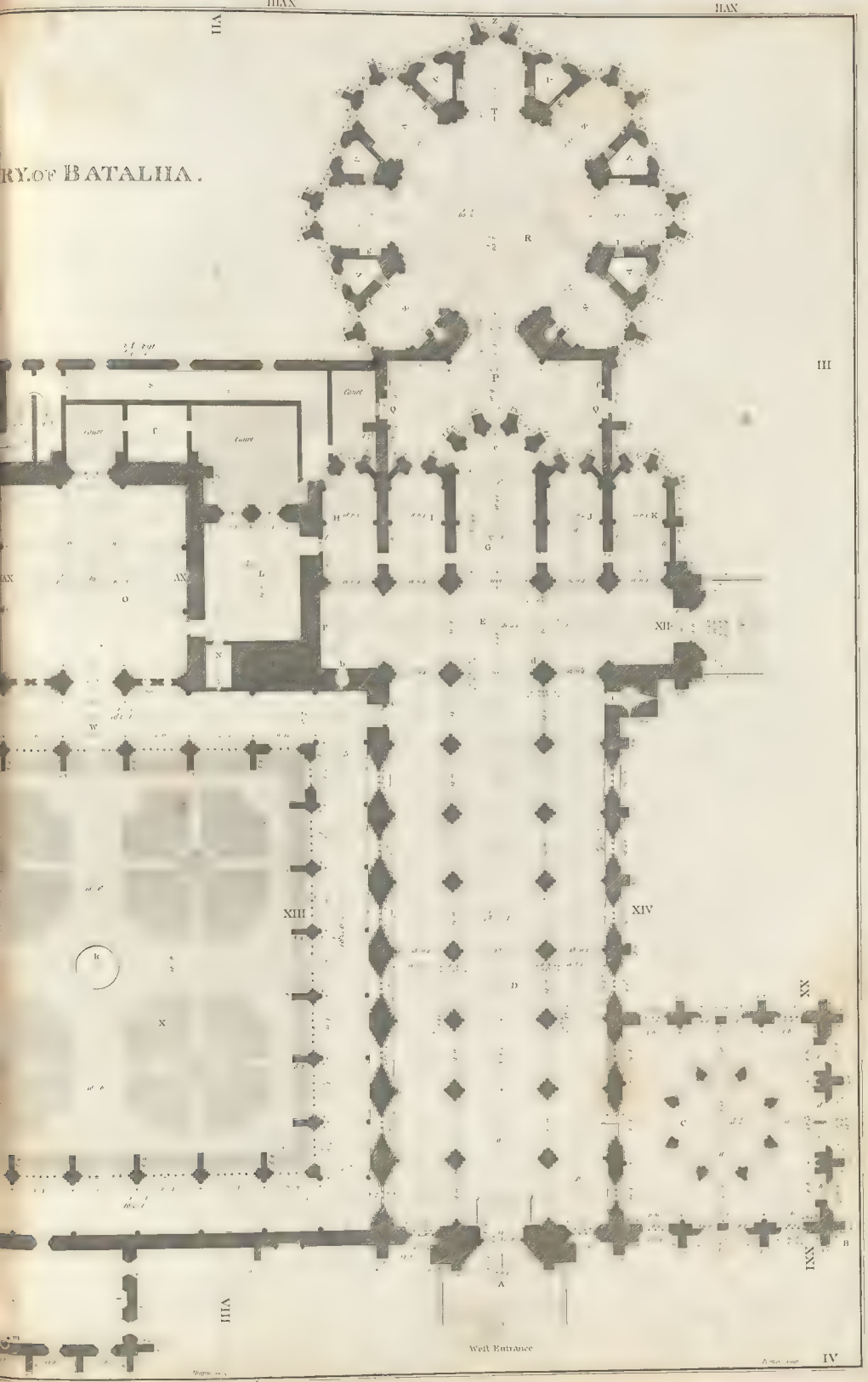
Since the former ſheets of this work were printed, the author has been favoured by the Rev. Herbert Hill, chaplain to the Britiſh Factory at Liſbon, with an Extract from a Portugueſe Hiſtorian *; wherein are aſcertained, apparently from good authority, the name and country of the Architect of BATALHA. The following is a Tranſlation of the paſſage:

" Fr. Luis de Souſa, in the Hiſtory of the Dominican Order, part I. and D. Fernandes de Menezes, Count de Ereiceira, at " the end of the Life of King John I. have both deſcribed the Royal Monaſtery of Batalha with all the exactneſs and elegance " which it well merits. To theſe Authors I refer the Reader for an account of that noble edifice; and left my unpoliſhed lan- " guage ſhould fully its renown, I ſhall only obſerve, that the Architect of it was an *Iriſhman*, named *David Hacket*, who then " lived in Vianna da Caminha, as may be ſeen in one of the Memoirs of Fr. Antonio da Madureira, a Dominican friar, and a " celebrated genealogiſt."

* " *Joze Soares da Sylva Mem. del Rey D. Joſé* 1°. *Tom.* 2. *p.* 533 "

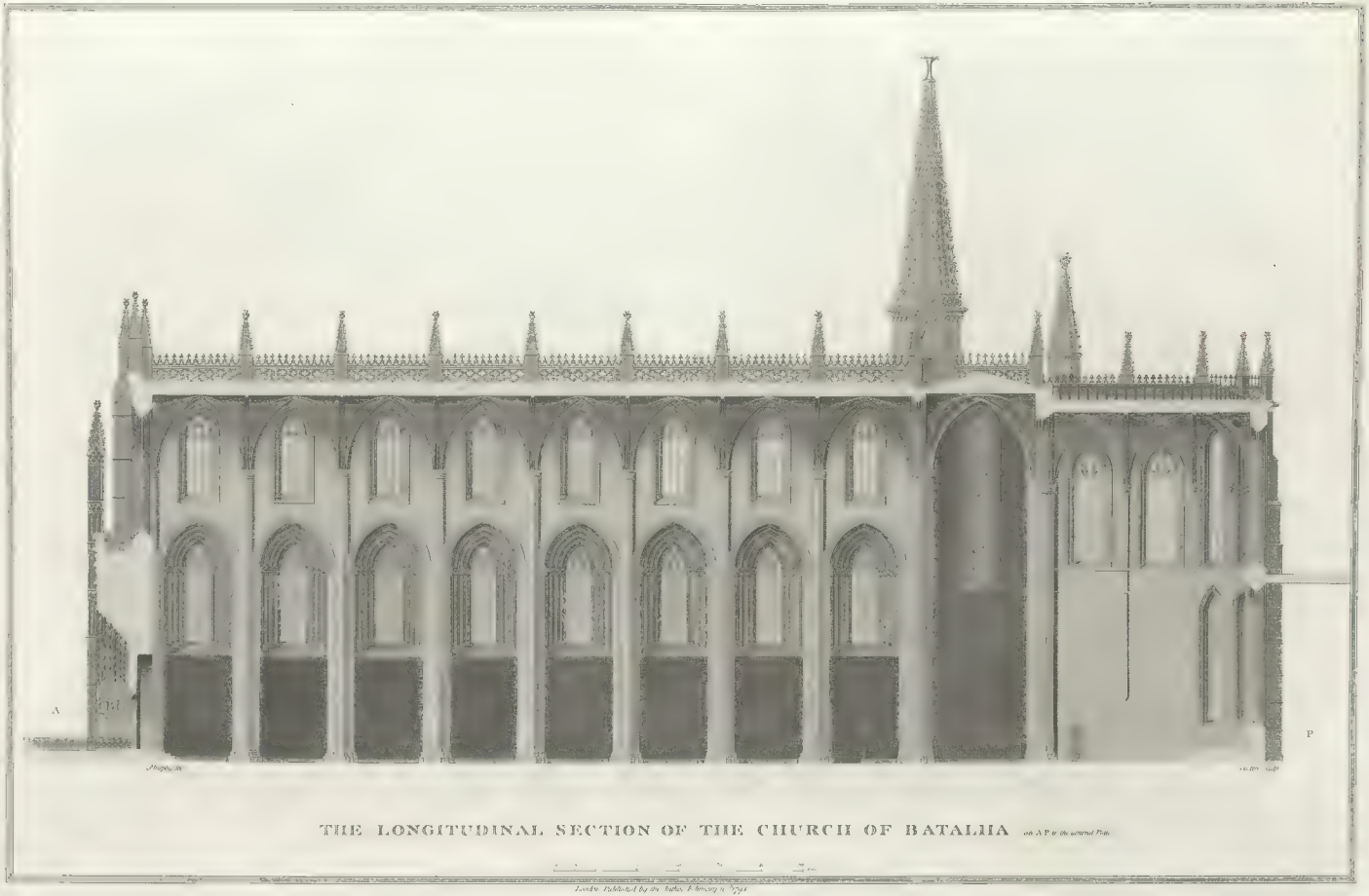
A. GENERAL PLAN OF THE CHURCH AND ROYAL MONA




RY. OF BATALHA.
West Entrance

THE NORTH ELEVATION OF THE CHURCH OF BA

A, WITH THE UNFINISHED MAUSOLEUM OF KING EMANUEL.



THE LONGITUDINAL SECTION OF THE CHURCH OF BATALHA on A3 to the general Plan

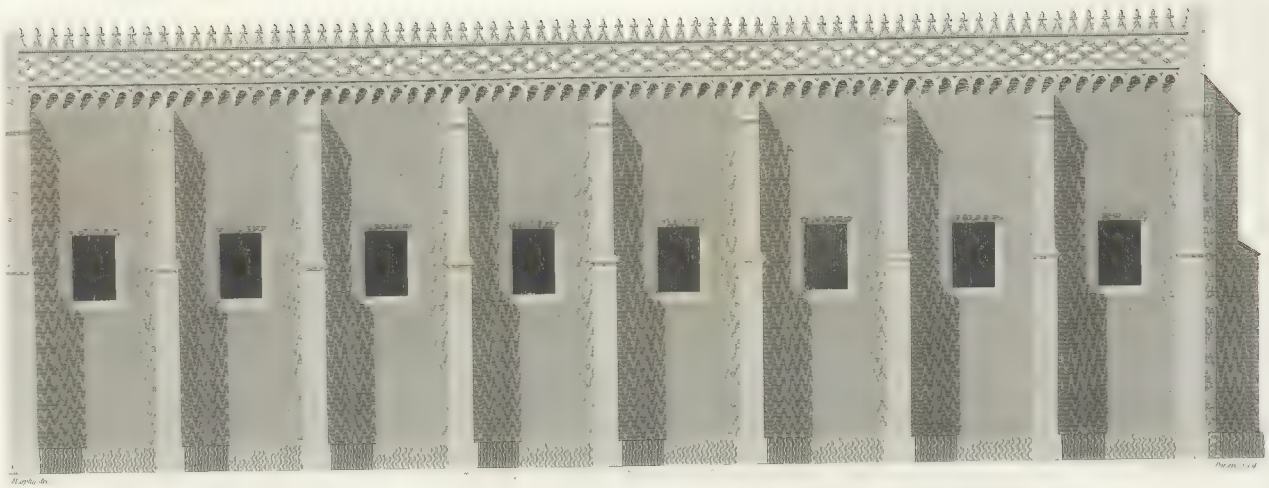
London Published by Mr. Arthur Pond 1794

The Elevation of the Chancel Palatella.

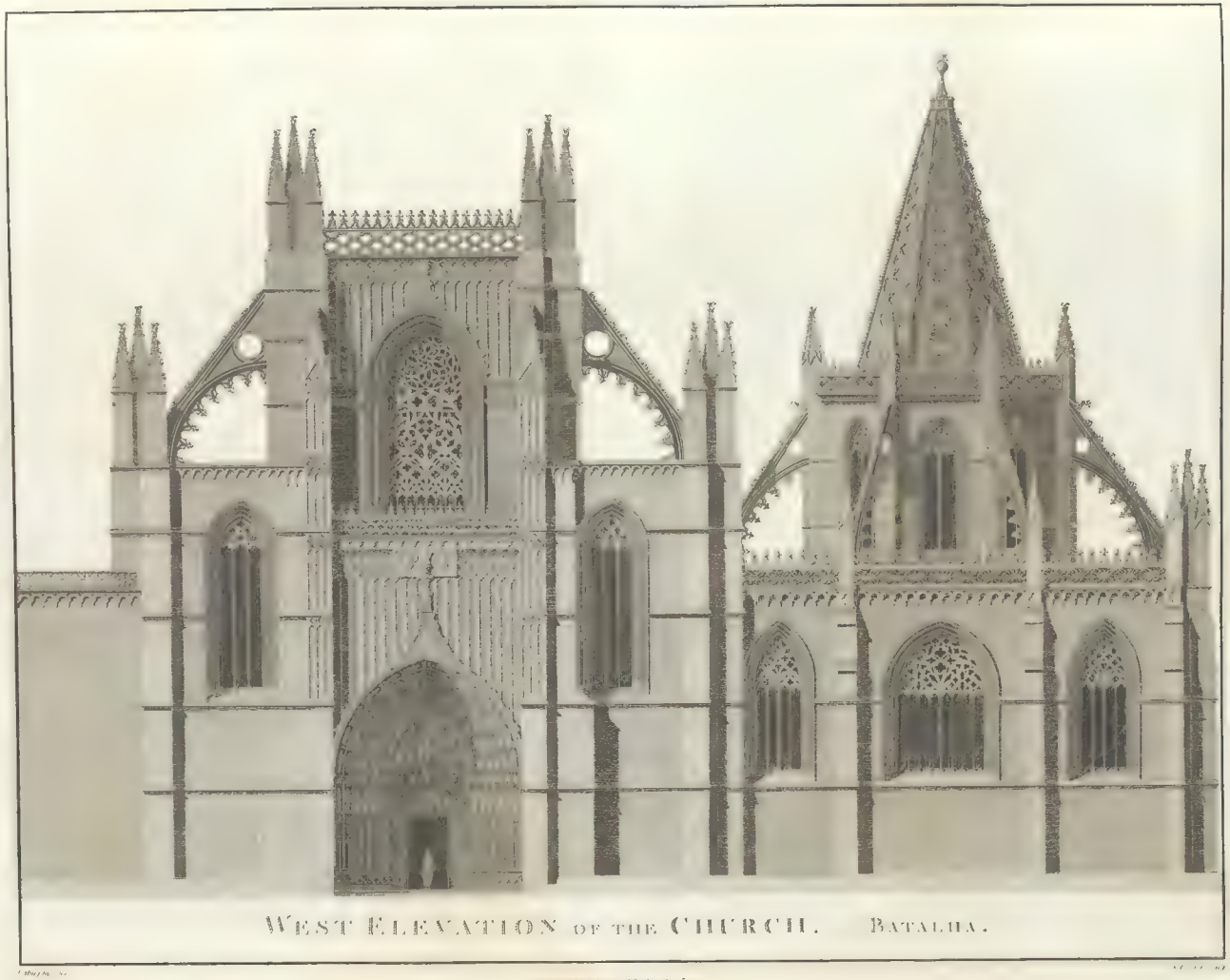
Engraved by *to the Laws of XII to the Antient Plates of this Book* *Lowry sc*

London. Published as the Act directs April 1st 1793

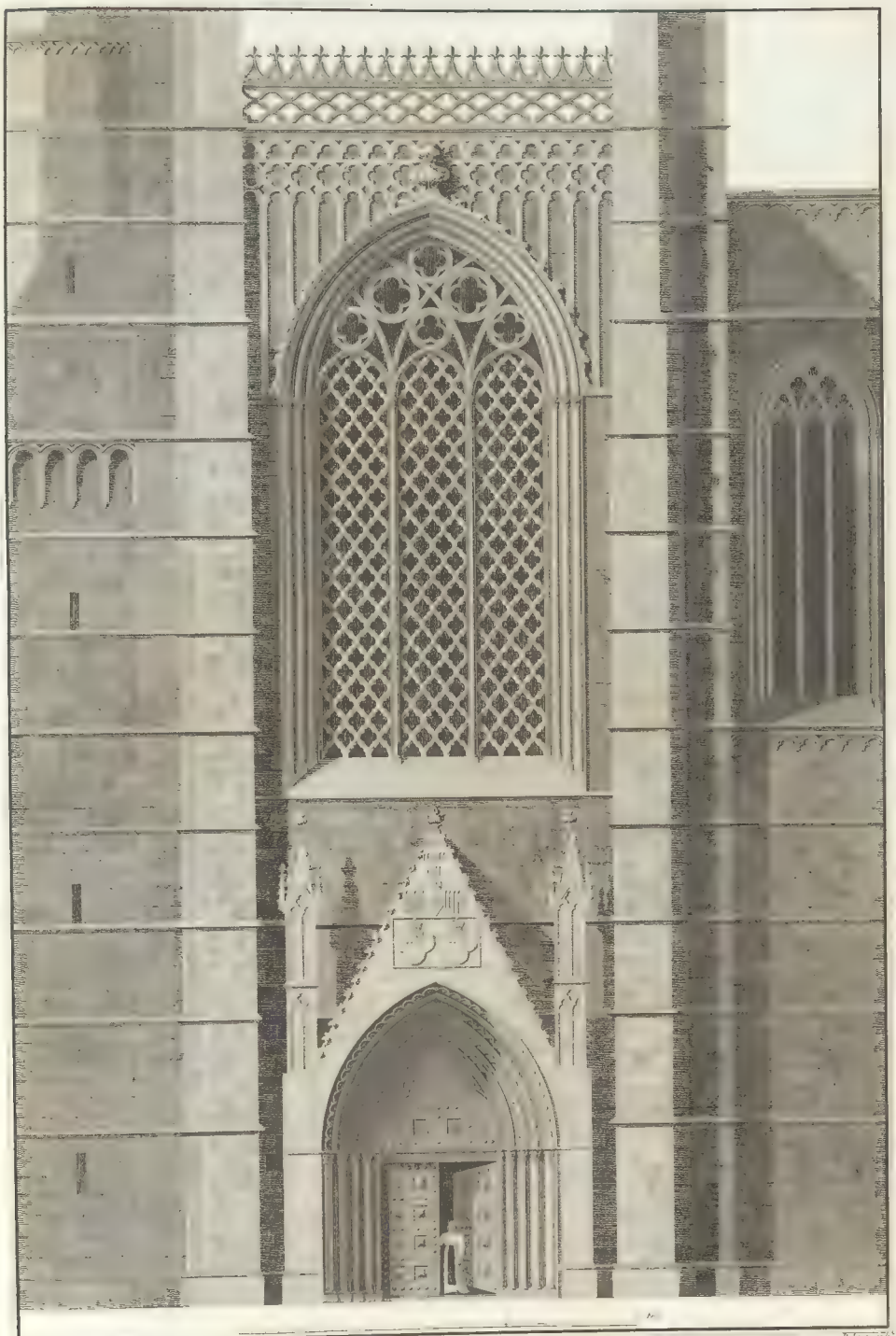
A SECTION OF THE CHAPTER HOUSE AT BATALHA.



THE WEST ELEVATION OF THE REFECTORY OF BATALHA



WEST ELEVATION OF THE CHURCH. BATALHA.



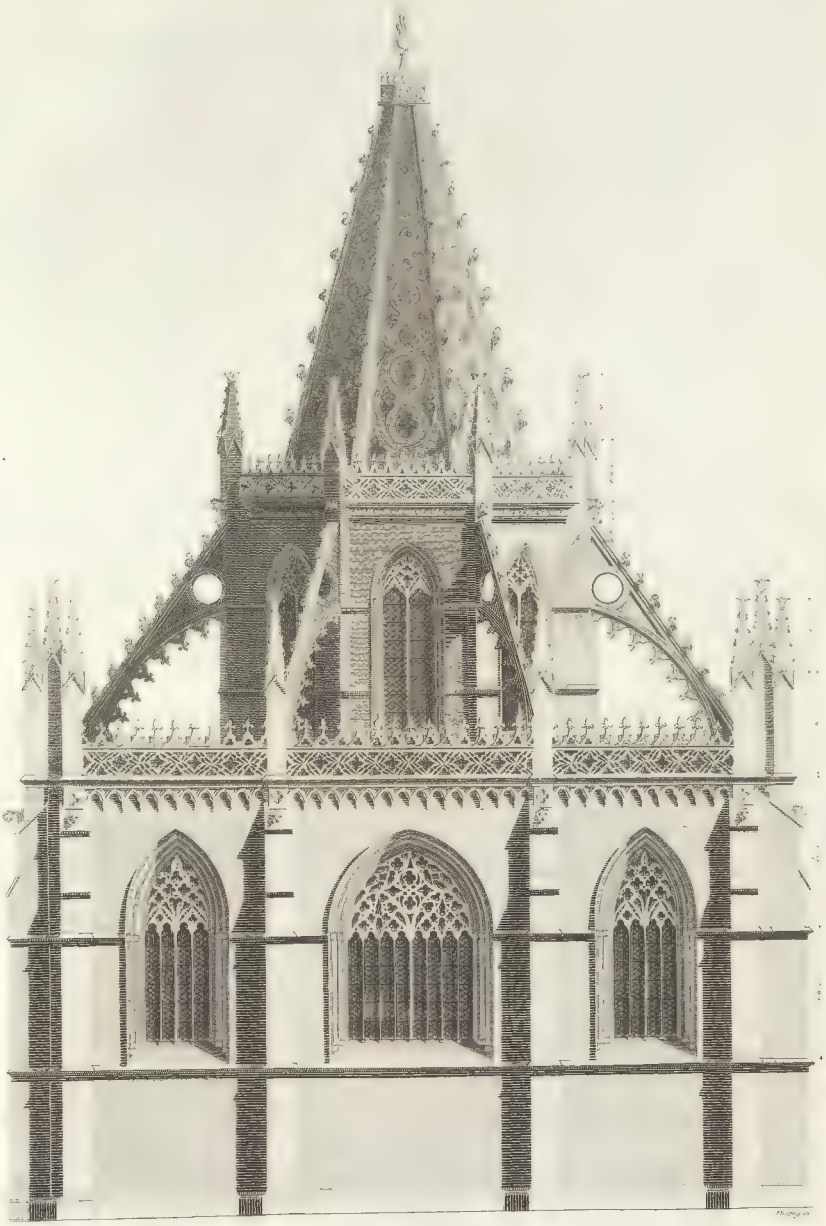
ELEVATION OF THE TRANSEPT ENTRANCE. BATALHA.

J. Wiseby del.

B. Emery sculp.

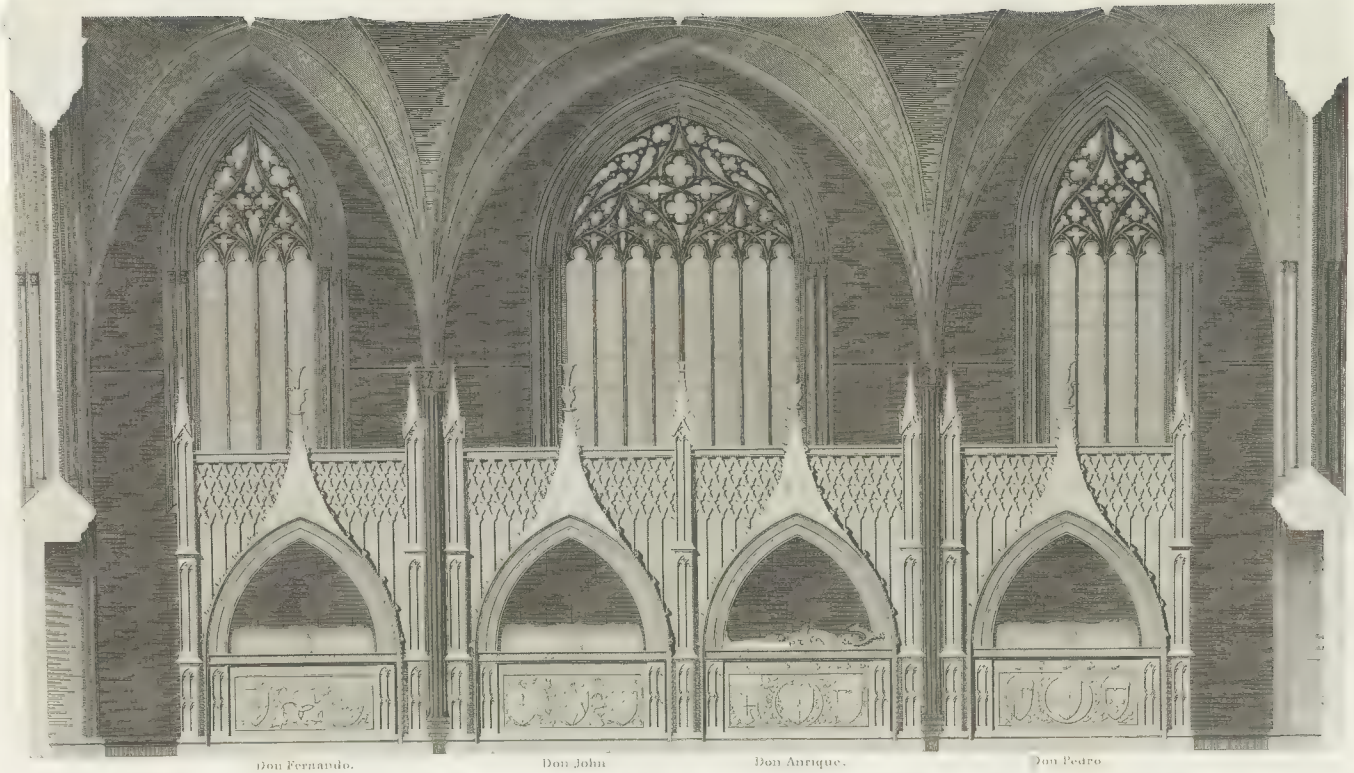
INTERIOR VIEW OF THE CHURCH OF BATALHA.

London Published by J.K. J. Taylor Jan.y 1st 1794



THE SOUTH ELEVATION OF THE MAUSOLEUM OF KING JOHN Ist AT BATALHA.

NB The Pyramid which formerly covered the building was thrown down by the great Earthquake of the year 1755 it is here restored from an old painting on one of the Windows of the Church



SECTION OF THE MAUSOLEUM OF KING JOHN I. *See the Line A.M. in the general Plan of Batalha*

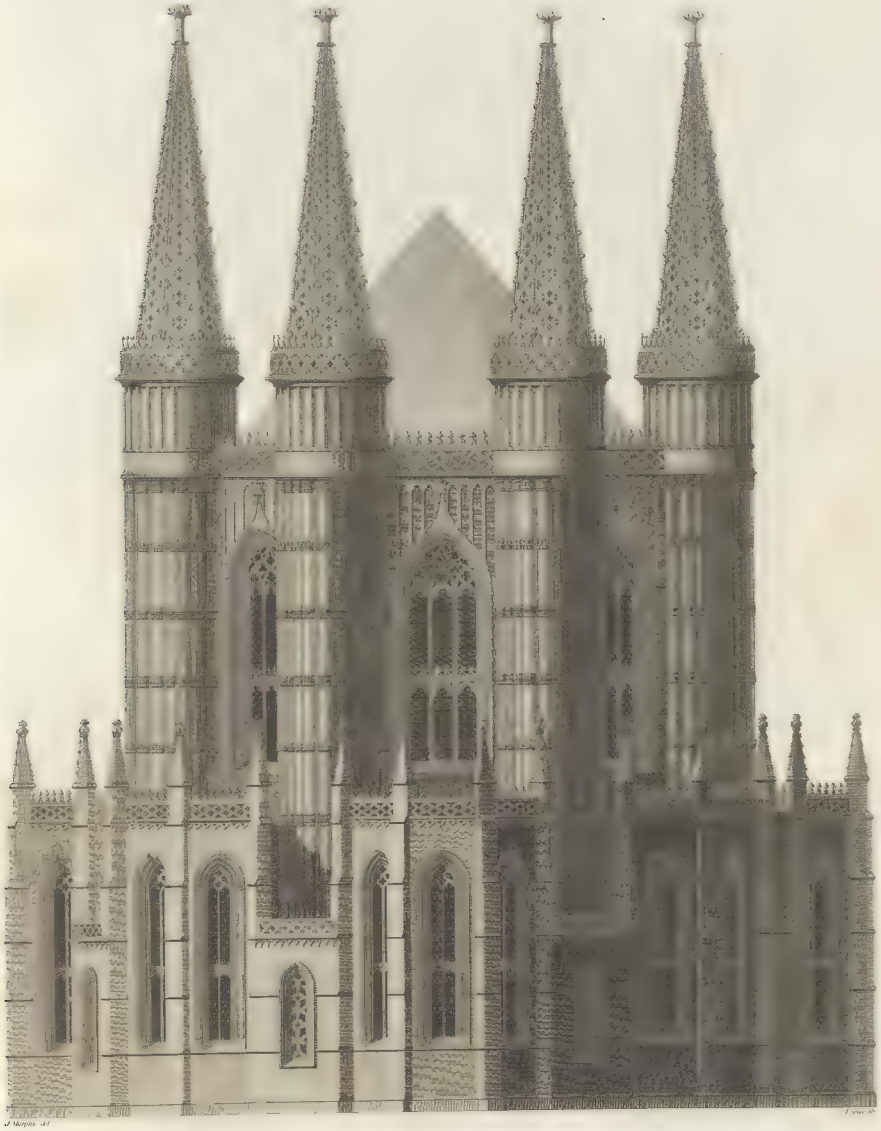
THE EFFIGIES OF KING JOHN THE FIRST AND QUEEN PHILIPPA.

THE ENTRANCE OF THE MAUSOLEUM OF EMANUEL THE GREAT KING OF PORTUGAL

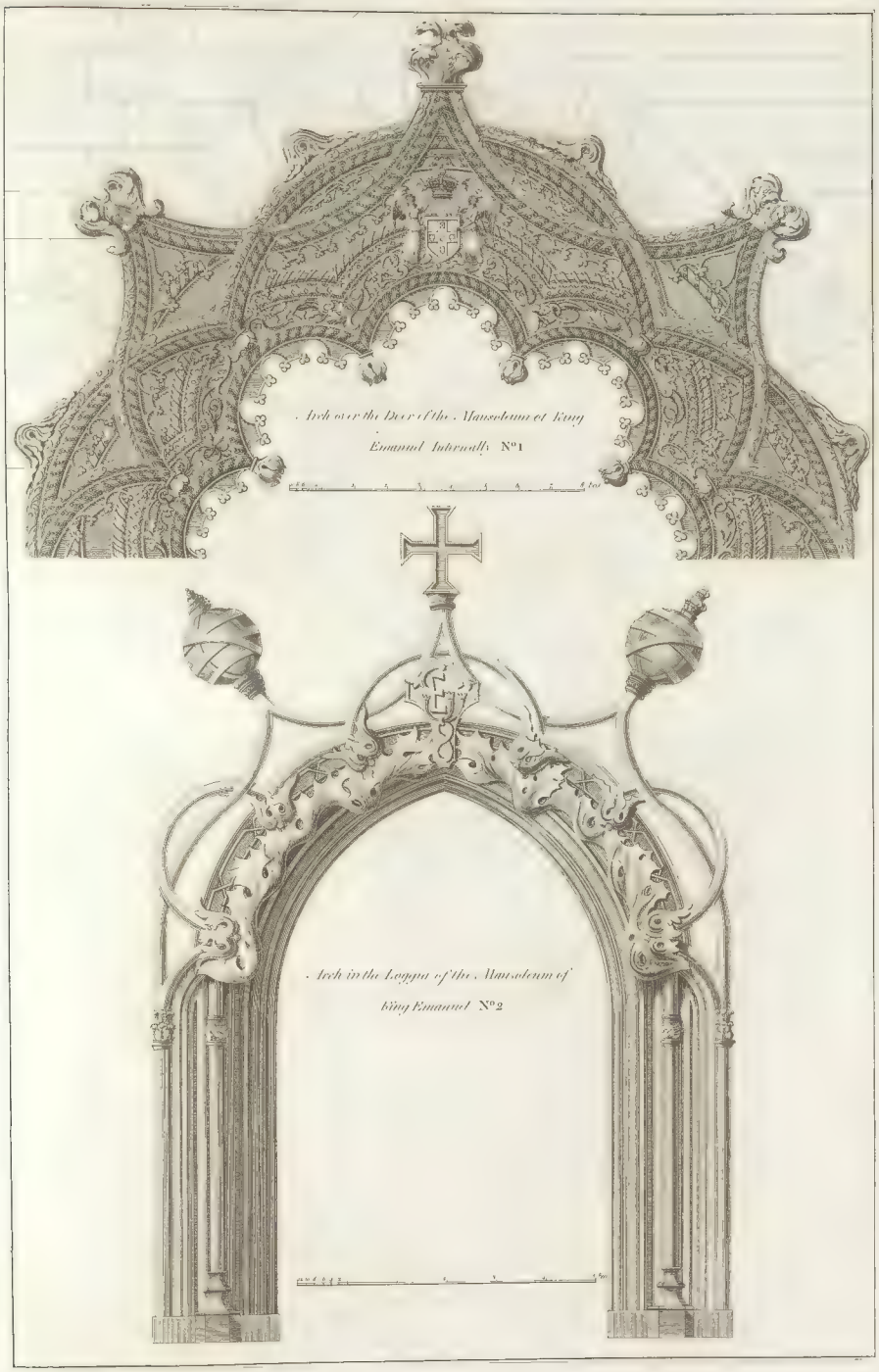
Published [illegible]

To his Royal Highness D. John Prince of Brazil &c. &c. &c.

This Plate is dedicated by his Royal Highness's most dutiful [illegible]



DESIGN FOR COMPLETING THE MAUSOLEUM OF KING EMANUEL



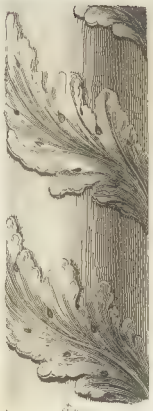
Murphy del.

ARCHES APPERTAINING TO THE MAUSOLEUM OF K. EMANUEL._BATALHA

Published by J. Taylor, Jun.r 17th 1838

ORNAMENTS MOTTOS &c APPERTAINING TO THE ROYAL MONASTERY OF BATALHA.

Fig. 1



2

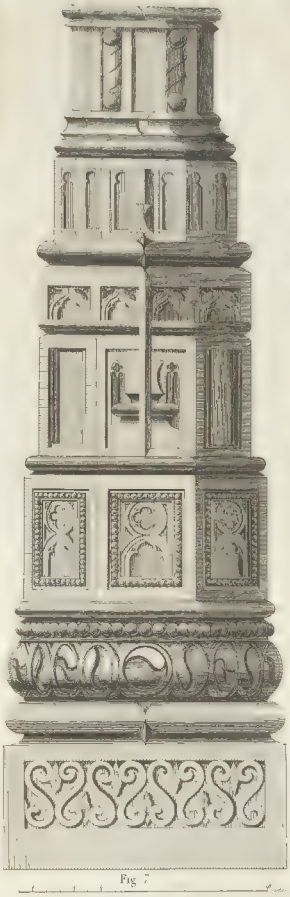
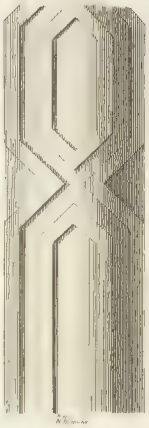


Fig. 7

1

8



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9

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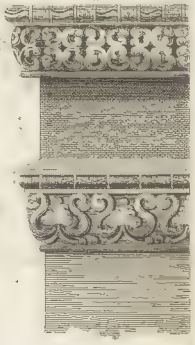


11

15

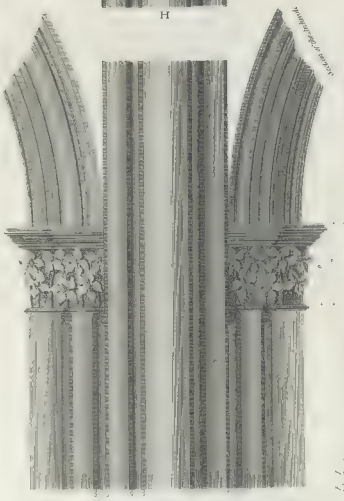
14

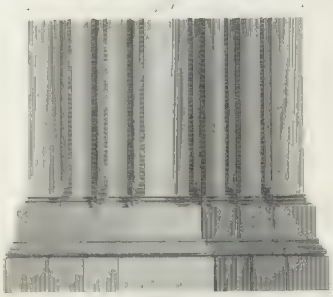
13

12

COLUMNS, ORNAMENTS, AND HIEROGLYPHICKS, IN THE MAUSOLEUM OF KING EMANUEL.

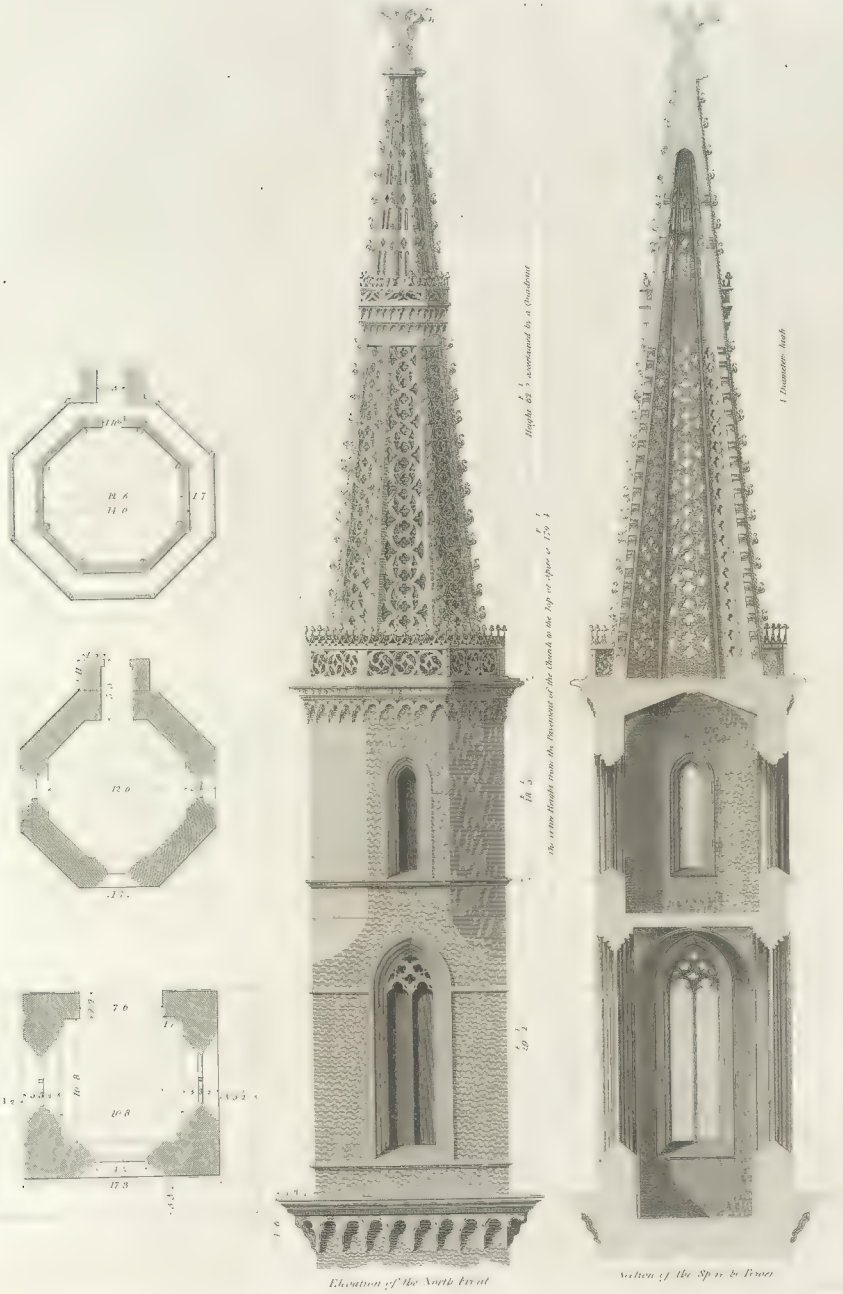
H





PLAN
OF THE PILLARS
OF
THE CHURCH.

ELEVATION
of one of the
PILLARS
OF THE
CHURCH OF BATALHA
w.th its several
PLANS, SECTIONS &c.



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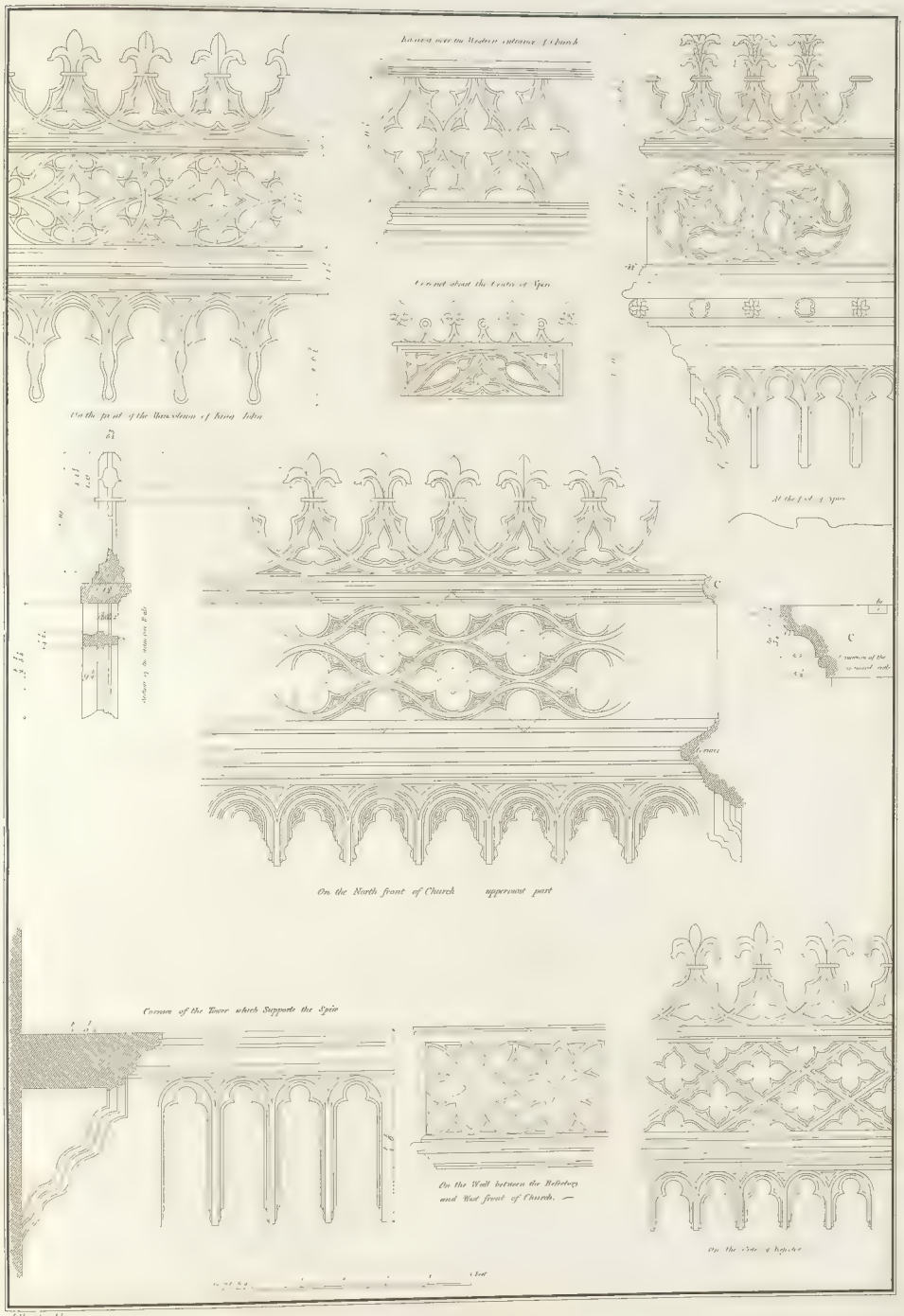

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Plans, Elevations, and Sections of the Church and Monaſtery.
The Manner of proportioning the Church.
The Mauſoleum of the Founder, King John the Firſt.
The Effigies of King John I. and Queen Philippa his Wife.
The Mauſoleum of King Emanuel.
The Principal Windows throughout the Building, with their ſeveral Plans accurately figured.
The Columns, Baſes, and Capitals of the Church.
The Cornices, Belts, Ribs of the Vaults, Mullions, Architraves, Stiles, and other Mouldings, laid down on a large Scale, and accurately figured.
The Railing of the Church and of the Chapels externally, with the carved Orbs or Pateras of the Vaults and other ornamental Pieces.
The Monuments and Inſcriptions throughout the Building.
A View of the Entrance into the Mauſoleum of King Emanuel, with the Columns and Hieroglyphics that ſurround it, &c. &c. with every neceſſary Explanation relating to each Part.

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London, July, 1794.

Dedicated to the Right Hon.r WILLIAM CONYNGHAM.

GOTHIC ARCHITECTURE,

ACCURATELY DELINEATED.

No. III.

PLANS, ELEVATIONS, SECTIONS, and VIEWS

OF THE

CHURCH AND ROYAL MONASTERY OF

B A T A L H A,

Including the MAUSOLEA of King John I. and King Emanuel,

SITUATE IN THE

PROVINCE OF ESTRE-MADURA, IN PORTUGAL;

Measured and Drawn on the Spot, in the Year 1789,

WITH AN

HISTORICAL AND DESCRIPTIVE ACCOUNT OF THIS FAMOUS

GOTHIC STRUCTURE.

TRANSLATED FROM THE PORTUGUESE OF FR. LUIS DE SOUSA;

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WITH AN

HISTORY AND DESCRIPTION

By FR. LUIS DE SOUSA;

WITH REMARKS:

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